BIRD STRIKE AND HAILSTORM - INSPECTION/CHECK

EFFECTIVITY: ALL

1. General

WARNING:
- **WORK IN VENTILATED AREAS.**
- **USE MASK, SAFETY GOGGLES AND RUBBER OR LATEX GLOVES, WHEN HANDLING BIRD REMAINS.**
- **THE RUBBER OR LATEX GLOVES MUST BE DISPOSED AFTER USE.**
- **WHEN YOU HANDLE BIRD STRIKE REMAINS, OBEY THE LOCAL AUTHORITY RULES TO PREVENT HEALTH PROBLEMS.**

A. This section gives the procedures to do an inspection of the aircraft structure after a bird strike or hailstorm.

B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
05-50-08-200-802-A	BIRD STRIKE	ALL
05-50-08-200-803-A	HAILSTORM	ALL

TASK 05-50-08-200-802-A
EFFECTIVITY: ALL

2. BIRD STRIKE

A. General

(1) This task gives the procedures to do an inspection after a bird strike.

(2) If you find damage related to bird strike impact, you must refer to the applicable Section of the SRM or AMM to do the damage assessment or troubleshooting.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 71-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 55-35-00-000-801-A/400	VERTICAL-STABILIZER LEADING EDGE - REMOVAL
AMM TASK 55-35-00-400-801-A/400	VERTICAL-STABILIZER LEADING EDGE - INSTALLATION
AMM TASK 57-41-00-000-801-A/400	LEADING EDGE I - REMOVAL
AMM TASK 57-41-00-400-801-A/400	LEADING EDGE I - INSTALLATION
AMM TASK 57-42-00-000-801-A/400	LEADING EDGE II - REMOVAL
AMM TASK 57-42-00-400-801-A/400	LEADING EDGE II - INSTALLATION
AMM TASK 57-43-00-000-801-A/400	LEADING EDGE III - REMOVAL
AMM TASK 57-43-00-400-801-A/400	LEADING EDGE III - INSTALLATION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
Concentrated Liquid Detergent	DETERGENT	

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Outside the aircraft

I. Preparation

SUBTASK 841-003-A

WARNING: WHEN YOU HANDLE BIRD STRIKE REMAINS, OBEY THE LOCAL AUTHORITY RULES TO PREVENT HEALTH PROBLEMS. PUT ON DISPOSABLE GLOVES AND COVERALL. IF THE CLEANING PROCEDURE CAUSES SPLASHING, PUT ON GOGGLES AND A SURGICAL MASK. DO NOT TOUCH THE EXPOSED PARTS OF YOUR BODY WITH YOUR GLOVES. DO NOT USE AIR OR WATER UNDER PRESSURE TO CLEAN THE AFFECTED PARTS. USE DETERGENT TO CLEAN THE AFFECTED PARTS. PUT THE BIRD REMAINS, GLOVES, GOGGLES, MASK AND OVERALL IN A SEALED PLASTIC BAG. OBEY THE LOCAL AUTHORITY RULES TO DISCARD THE BAGS. WASH YOUR HANDS WITH SOAP AND WATER OR AN ALCOHOL-BASED GEL.

(1) Clean the inspection area as follows:

(a) Remove the bird remains.

(b) Remove the parts that can cause difficulty when you do an inspection.

(c) Wipe the inspection area clean with detergent. Make sure that there are no signs of bird remains and that the aircraft parts are fully clean.

J. Inspection After Bird Strike Damage

SUBTASK 210-003-A

(1) Identify the aircraft zones affected by bird strike. Examine the specific items below which are related with these zones. You must do a general visual inspection (GVI) of the component and look for signs of:

(a) Dents and nicks.

(b) Missing or pulled apart structure.

(c) Wrinkles, buckles and cracks on the structure.

(d) Bent or twisted parts.

(e) Fiber breakout or delamination.

(f) Loose fasteners.

(g) General misalignment of the structure and assemblies.

(2) Examine the external fuselage skin, in the area adjacent to the bird strike. In the case of an external damage, get access to the internal areas and examine:

(a) Frames, stringers, and skin splice.

(b) Fittings and structural component mounts.

(c) All of the mechanical and electrical components of the aircraft systems in this area.

(3) Examine the main door, and baggage door skins. In the case of an external damage, get access to the internal areas and examine:

(a) All of the mechanical and electrical components of the mechanical and electrical systems of the doors.

(b) Internal structural components.

(4) Examine the components in composite material (See the items below) for displacement, distortion, flaking paint, cracks, and pulled or missing fasteners. Examine the two sides of the honeycomb panels for cracks, delamination, soft spots, and core damage.

(a) Nose and main landing-gear doors and their attachment.

(b) Wing, elevator, horizontal stabilizer tip, and horizontal stabilizer leading edge root fairings.

(c) Forward, center, rear, and lateral wing-to-fuselage fairings.

(d) Pylon and tail boom fairings. If the rear fixed fairing is damaged, get access to the internal region and examine the electrical components.

(e) Dorsal fin and vertical stabilizer leading edge.

(f) Radome. In case of damage, get access to the internal region and examine the electrical components.

(g) Inboard and outboard flaps, ground spoiler, speed brake, flap and aileron shrouds, aileron, spring and servo tabs, and wing trailing edge external surfaces. In these cases, examine their mechanism and attachment fittings. Do the functional check for each component, if necessary.

(h) Forward hydraulic door.

(5) Examine the passenger cabin windows, cockpit windows and windshield for delamination, and cracks and the adjacent structure for distortion, cracks, and pulled or missing rivets.

(6) Examine the wing and horizontal stabilizer leading edge skins for cracks, scratches, dents, or other damage. In these cases, remove them and examine the aileron control cables and the anti-icing system components.

(a) Vertical stabilizer leading edge - removal (AMM TASK 55-35-00-000-801-A/400).

(b) Vertical stabilizer leading edge - installation (AMM TASK 55-35-00-400-801-A/400).

(c) Wing leading edge I - removal (AMM TASK 57-41-00-000-801-A/400).

(d) Wing leading edge I - installation (AMM TASK 57-41-00-400-801-A/400).

(e) Wing leading edge II - removal (AMM TASK 57-42-00-000-801-A/400).

(f) Wing leading edge II - installation (AMM TASK 57-42-00-400-801-A/400).

(g) Wing leading edge III - removal (AMM TASK 57-43-00-000-801-A/400).

(h) Wing leading edge III - installation (AMM TASK 57-43-00-400-801-A/400).

(7) Examine the wing, horizontal stabilizer and vertical stabilizer skins for cracks, scratches, dents, or other damage. In case of damage, get access to the internal region and examine the structural and mechanical components.

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 71-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

(8) Examine the nacelle components as follows:

For components in composite material, inspect the damage region for displacement, distortion, flaking paint, cracks, and pulled or missing fasteners. For components in metallic material, inspect the damage region for cracks, scratches, dents, or other damage.

(a) Upper and lower fan cowling external skin. In case of damage, get access to the internal region and examine the structural and mechanical components.

(b) Lipskin, outer skin, and barrel assembly of the air intake. If the barrel external skin and the lipskin of the air intake are damaged and/or there is evidence of bird ingestion to the core of the engines, refer to the latest revision of RR Maintenance Manual CSP34022, Task05-50-00-200-804.

(c) Plain exhaust nozzle external skin, as applicable.

(d) LH and RH side beams, upper and lower door, and rear structure external skins of the thrust reverser, as applicable. If damage occurs to the door skins, get access to the internal region and examine the structural and mechanical components.

(9) Examine the elevator and rudder I/II skins for cracks, scratches, dents, or other damages. In case of damage, get access to the internal region and examine the structural and mechanical components.

(10) To do a damage assessment or troubleshooting, refer to the applicable Section of the SRM or AMM.

K. Follow-on

SUBTASK 842-003-A

(1) Install the panels or other items possibly removed for the inspection above.

TASK 05-50-08-200-803-A
EFFECTIVITY: ALL

3. HAILSTORM

A. General

(1) This task gives the procedures to do an inspection after hailstorm.

(2) If you find damage related to hail impact, you must refer to the applicable Section of the SRM or AMM to do the damage assessment or troubleshooting.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 71-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 55-35-00-000-801-A/400	VERTICAL-STABILIZER LEADING EDGE - REMOVAL
AMM TASK 55-35-00-400-801-A/400	VERTICAL-STABILIZER LEADING EDGE - INSTALLATION
AMM TASK 57-41-00-000-801-A/400	LEADING EDGE I - REMOVAL
AMM TASK 57-41-00-400-801-A/400	LEADING EDGE I - INSTALLATION
AMM TASK 57-42-00-000-801-A/400	LEADING EDGE II - REMOVAL
AMM TASK 57-42-00-400-801-A/400	LEADING EDGE II - INSTALLATION
AMM TASK 57-43-00-000-801-A/400	LEADING EDGE III - REMOVAL
AMM TASK 57-43-00-400-801-A/400	LEADING EDGE III - INSTALLATION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Outside the aircraft

I. Preparation

SUBTASK 841-004-A

(1) Get access to the inspection area as follows:

(a) Remove the parts that can cause difficulty when you do an inspection.

(b) Clean the inspection area, if necessary.

J. Inspection After Hailstorm

SUBTASK 210-004-A

(1) Identify the aircraft zones affected by hail impact. Examine the specific items below which are related with these zones. You must do a general visual inspection (GVI) of the component and look for signs of:

(a) Dents and nicks.

(b) Missing or pulled apart structure.

(c) Wrinkles, buckles and cracks on the structure.

(d) Bent or twisted parts.

(e) Fiber breakout or delamination.

(f) Loose fasteners.

(g) General misalignment of the structure and assemblies.

(h) Paint peel.

(i) Breakage.

(2) Examine the external fuselage skin:

NOTE: In case of damage, get access to the internal region and examine the structural and mechanical components.

(a) Red beacon, antennas, pitot sensors, TAT sensors, AoA sensors, anemometric statics ports, and taxi light lens landing light lens.

(b) Fuselage skins, fuselage upper skins, and fuselage lateral skins.

(c) Frames, stringers, and skin splice.

(d) Fittings and structural component mounts.

(e) All of the mechanical and electrical components of the aircraft systems in this area.

(3) Examine on wing skins:

NOTE: In case of damage, get access to the internal region and examine the structural and mechanical components.

(a) Wing upper and lower skins, winglet lending edge, winglet upper and lower skins, navigation light lens, landing light lens, flap and aileron upper and lower skins.

(4) Examine on wing-to-fuselage fairing:

NOTE: In case of damage, get access to the internal region and examine the structural and mechanical components.

(a) Wing inspection light lens, and exterior emergency light lens.

(5) Examine on vertical stabilizer skins:

NOTE: In case of damage, get access to the internal region and examine the structural and mechanical components.

(a) Vertical stabilizer skins, antennas, navigation light lens, and rudder I/II skins.

(6) Examine on horizontal stabilizer skins:

NOTE: In case of damage, get access to the internal region and examine the structural and mechanical components.

(a) Horizontal stabilizer upper and lower skins, elevator skins, and logotype light lens.

(7) Examine the main door, and baggage door skins. In the case of an external damage, get access to the internal areas and examine:

(a) All of the mechanical and electrical components of the mechanical and electrical systems of the doors.

(b) Internal structural components.

(8) Examine the components in composite material (See the items below) for displacement, distortion, flaking paint, cracks, and pulled or missing fasteners. Examine the two sides of the honeycomb panels for cracks, delamination, soft spots, and core damage.

(a) Nose and main landing-gear doors and their attachment.

(b) Wing, elevator, horizontal stabilizer tip, and horizontal stabilizer leading edge root fairings.

(c) Forward, center, rear, and lateral wing-to-fuselage fairings.

(d) Pylon and tail boom fairings. If the rear fixed fairing is damaged, get access to the internal region and examine the electrical components.

(e) Dorsal fin and vertical stabilizer leading edge.

(f) Radome. In case of damage, get access to the internal region and examine the electrical components.

(g) Inboard and outboard flaps, ground spoiler, speed brake, flap and aileron shrouds, aileron, spring and servo tabs, and wing trailing edge external surfaces. In these cases, examine their mechanism and attachment fittings. Do the functional check for each component, if necessary.

(h) Forward hydraulic door.

(9) Examine the passenger cabin windows, cockpit windows and windshield for delamination, and cracks and the adjacent structure for distortion, cracks, and pulled or missing rivets.

(10) Examine the wing and horizontal stabilizer leading edge skins for cracks, scratches, dents, or other damage. In these cases, remove them and examine the aileron control cables and the anti-icing system components.

(a) Vertical stabilizer leading edge - removal (AMM TASK 55-35-00-000-801-A/400).

(b) Vertical stabilizer leading edge - installation (AMM TASK 55-35-00-400-801-A/400).

(c) Wing leading edge I - removal (AMM TASK 57-41-00-000-801-A/400).

(d) Wing leading edge I - installation (AMM TASK 57-41-00-400-801-A/400).

(e) Wing leading edge II - removal (AMM TASK 57-42-00-000-801-A/400).

(f) Wing leading edge II - installation (AMM TASK 57-42-00-400-801-A/400).

(g) Wing leading edge III - removal (AMM TASK 57-43-00-000-801-A/400).

(h) Wing leading edge III - installation (AMM TASK 57-43-00-400-801-A/400).

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 71-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

(11) Examine the nacelle components as follows:

For components in composite material, inspect the damage region for displacement, distortion, flaking paint, cracks, and pulled or missing fasteners. For components in metallic material, inspect the damage region for cracks, scratches, dents, or other damage.

(a) Upper and lower fan cowling external skin. In case of damage, get access to the internal region and examine the structural and mechanical components.

(b) Lipskin, fan blades, outer skin, and barrel assembly of the air intake. If the barrel external skin and the lipskin of the air intake damaged and/or there is evidence of hail ingestion to the core of the engines, refer to the latest revision of RR Maintenance Manual CSP34022, Task05-50-00-200-804.

(c) Plain exhaust nozzle external skin, as applicable.

(d) LH and RH side beams, upper and lower door, and rear structure external skins of the thrust reverser, as applicable. If damage occurs to the door skins, get access to the internal region and examine the structural and mechanical components.

(12) To do a damage assessment or troubleshooting, refer to the applicable Section of the SRM or AMM.

K. Follow-on

SUBTASK 842-004-A

(1) Install the panels or other items possibly removed for the inspection above.