

**Damage ID:** WU-1

**Dimensions (approx):** 650mm x 800mm

**Number of damages in single area:** 1

**Dimensions to nearest datum (from approximate centre of damage):** 300mm forward of Front spar, 400mm inboard of Rib 3.

**Description of damage:**

Damage is a single large penetration both the droop nose No. 2 and the wing topskin fixed topskin panels and D nose structure, which were simultaneously damaged after debris travelled through the lower bottom skin and exited at this point on the topskin. Damage to the internal structure at this location includes the drive rib 4 which is part of the leading edge structure (both inboard and outboard locations). Damage to the D nose at this location cannot be clearly defined as yet.

The drive motor for the droop nose located between the inboard and outboard rib 4 of the leading edge has been badly damaged upon impact and seems to have been on the direct path of trajectory through the wing.

Further details of the internal damages will only be revealed after removal of the droop nose and further access to the leading edge can be gained.

**Pictures of damage:**



**Figure 1: WU-1 Perforation at topskin Rib 12 location**



Figure 2: WU-Overall view showing damage to droop nose and D nose (hidden)

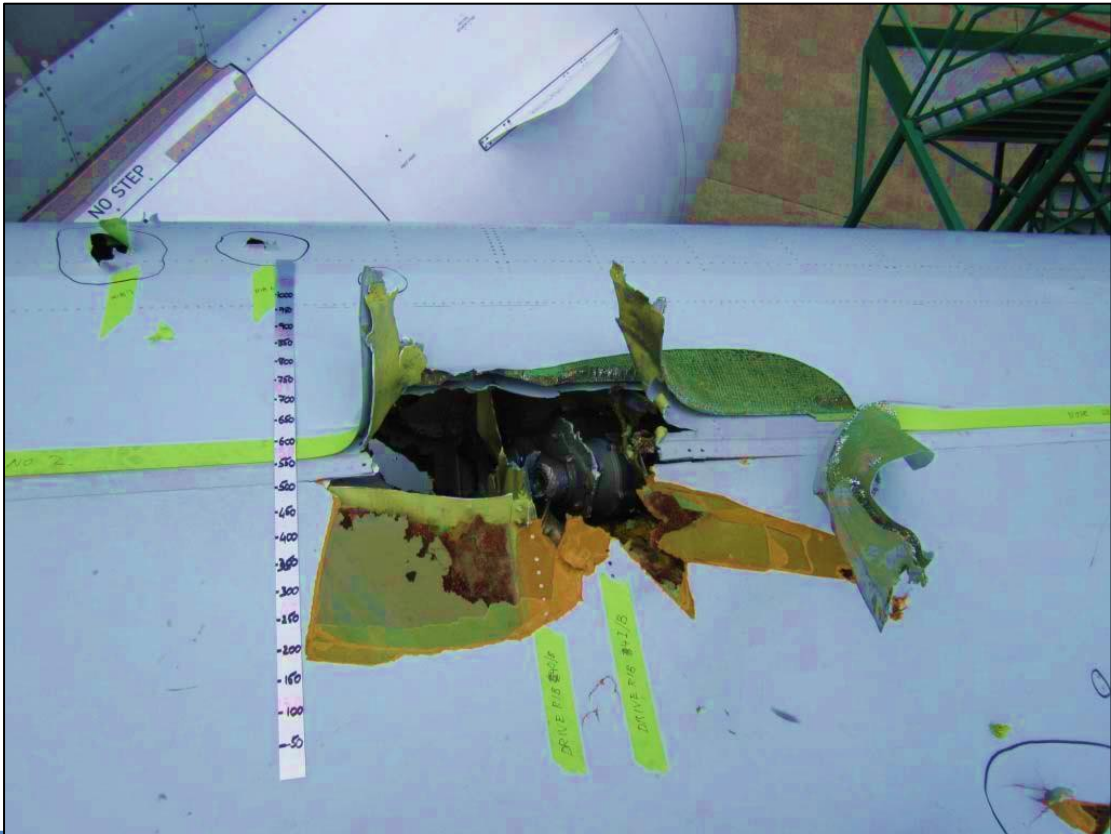


Figure 3: view showing location of damage relative to engine No. 2



Figure 4; Close up of damage between at leading edge ribs 4 showing droop nose drive motor



Figure 5: Forward view of engine and subsequent damage for this item.

**Dimensions (approx):** 450mm x 100mm

**Number of damages in single area:** 1

**Dimensions to nearest datum (from approximate centre of damage):**

Located above and outboard of Rib 9 and above and aft of stringer No. 1, 100mm from front spar and 150 mm from stringer No. 2.

**Description of damage:**

A clearly defined perforation of the top skin resulting in the displacement of some (7) topskin fasteners in the same area and located between the front spar and stringer No. 2 at Rib 9-10. A large chordwise crack is also emanating from the forward portion of the damage.

Internally, The Front spar has been penetrated and is damaged extensively, slightly outboard of Rib 9 while Rib 9 itself has suffered damage to the forward section has been penetrated close to the top skin.

**Pictures of damage:**

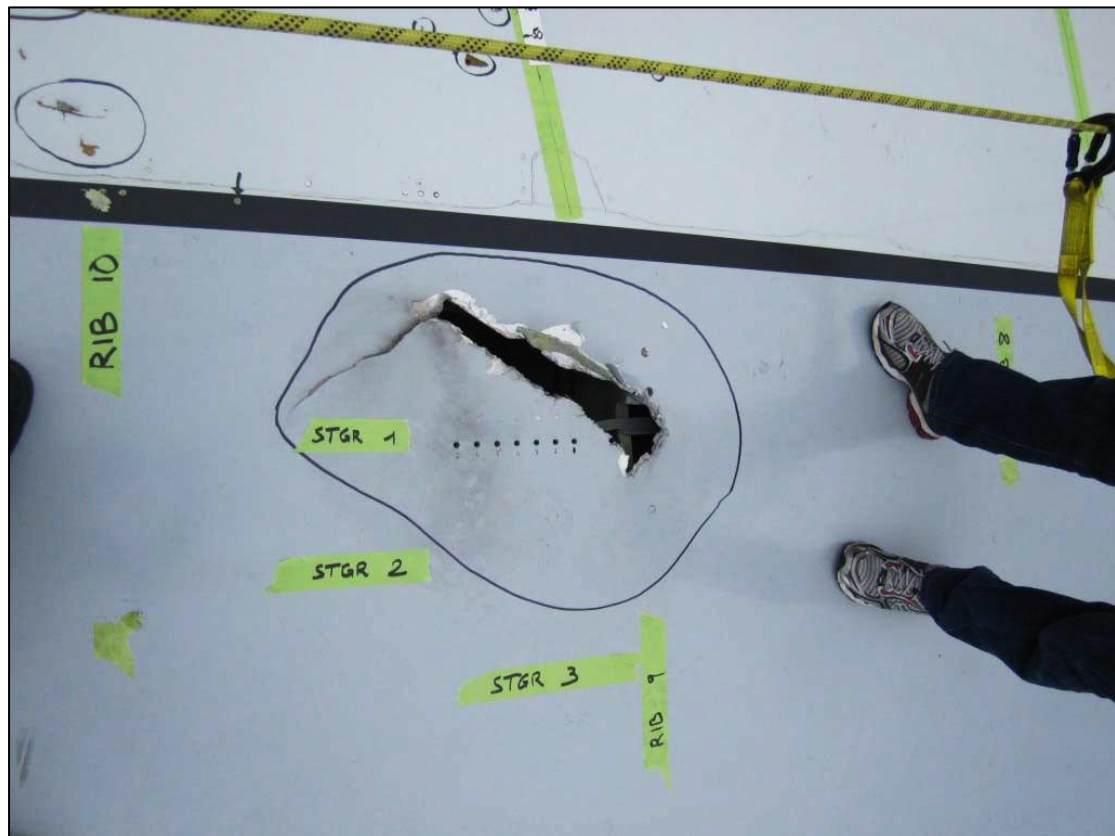


Figure 6: Location of damage WU-2

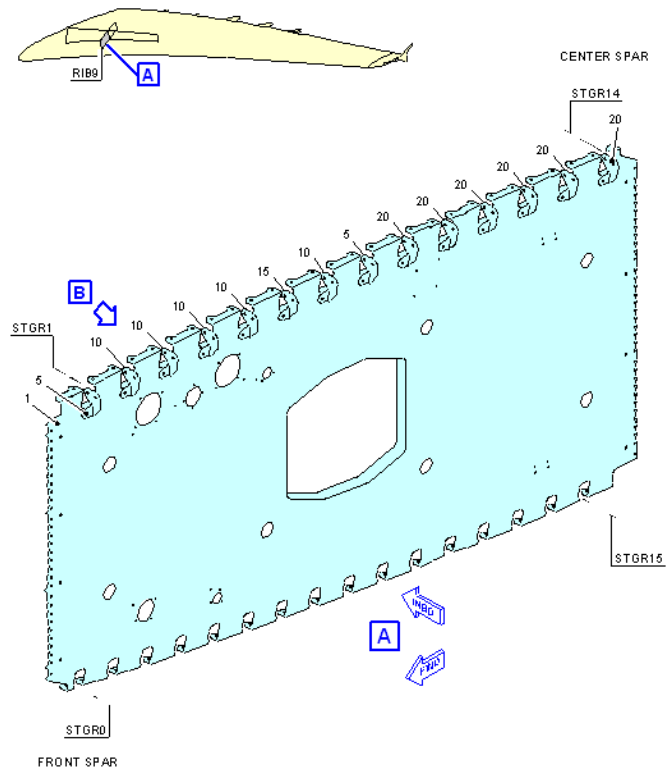


Figure 7: Rib 9 section damaged



Figure 8: Severed fuel pipe at frontspar/Rib 9



Figure 9: Section of front spar damaged view in aft direction)

**Damage ID:** WU-3

**PN:** [L57452198000](#) and [L57452496000](#) (mid and outboard top panel per SRM 57-41-11, Figure 6 and 7 respectively).

**Dimensions (approx):** 500mm x 500mm

**Number of damages in single area:** 8

**Dimensions to nearest datum (from approximate centre of damage):** 200mm forward of Front spar along the edge of panel outboard top panel.

**Description of damage:**

All damages appear superficial on the outer surface of these panels with no penetration of the honeycomb. There is also a slight bulge of the panel at the inboard edge.

**Pictures of damage:**

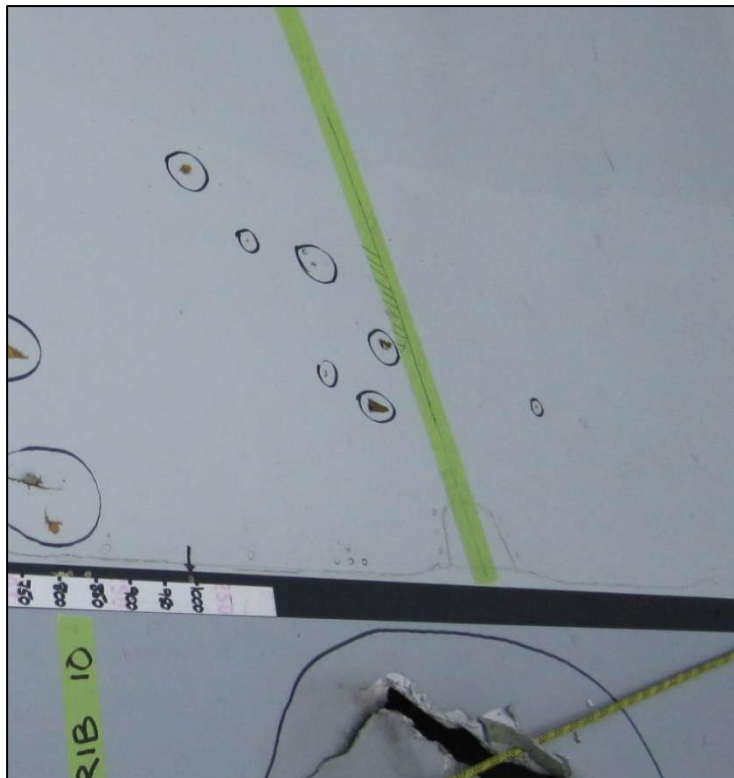


Figure 10: Close up view of seven damage locations

**Damage ID:** WU-4

**Dimensions (approx):** 600mm x 600mm

**Number of damages in single area:** 12

**Dimensions to nearest datum (from approximate centre of damage):**

Located slightly forward of front spar between ribs 10 and 11 (aft part of the panel)

**Description of damage:**

**Sevral damages to the surface of outboard top panel. 3 of the 12 damages show perforation of the panel with one damage still having part of the internal metallic structure lodged in the perforation.**

A clearly defined perforation of the top skin resulting in the displacement of some (7) topskin fasteners in the same area and located between the front spar and stringer No. 2 at Rib 9-10 A large chordwise crack is also emanating from the forward portion of the damage.

Internally, The Front spar has been penetrated and is damaged extensively, slightly outboard of Rib 9 while Rib 9 itself has suffered damage to the forward section has been penetrated close to the top skin

**Pictures of damage:**

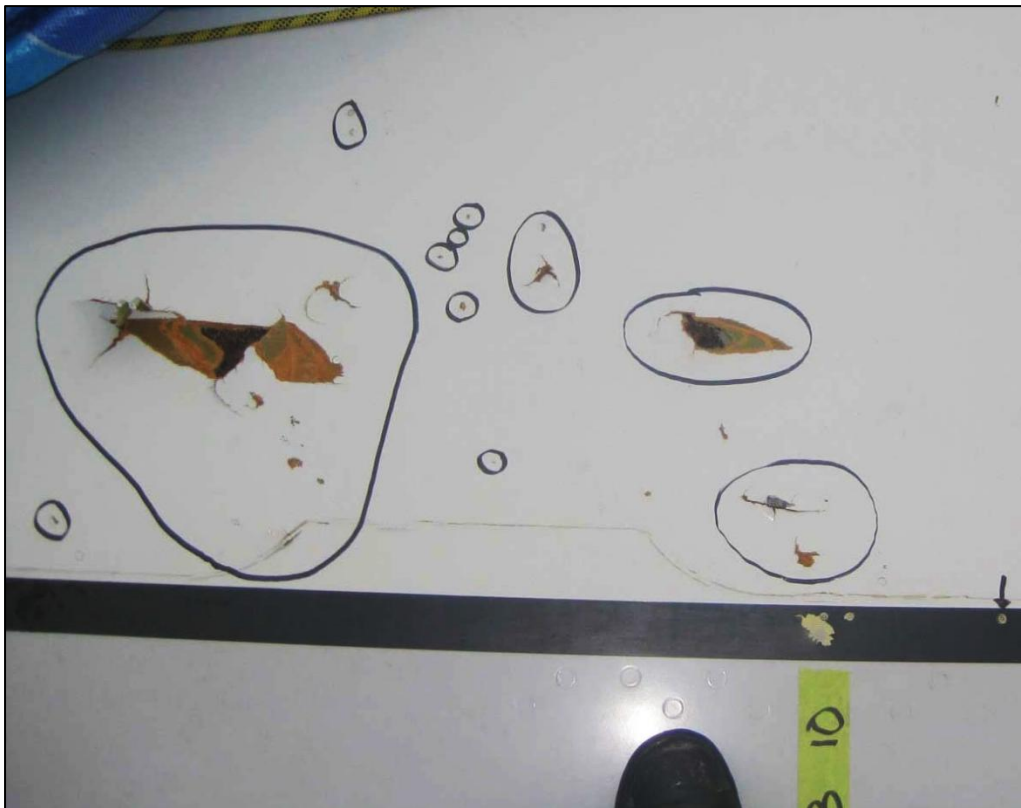


Figure 11: Overview showing all 12 damages





Figure 12: Largest of the 3 skin perforations with metal still lodged in structure



Figure 13: Skin perforation showing honeycomb



Figure 14: Perforation with metal lodged in structure