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Figure 1 (4/00A): General view of engine from forward port side.

Figure 2 (5/5): Engine forward starboard side, showing fracture of PTO housing mounting and engine casing mounting face, and upward bending of top cover plate.
Figure 3 (5/11): Detail of figure 2, showing general direction of stud bending (arrowed).

Figure 4 (05/13): Detail of figure 2, showing upward bending of top cover plate.
Figure 5 (5/17): Camshaft drive chain (timing chain).

Figure 6 (5/18): Detail of left-hand side of figure 5.
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Figure 7 (5/19): Detail of centre field of figure 5.

Figure 8 (5/20): Detail of right-hand side of figure 5.
Figure 9 (8/00A): Aft starboard side of engine block showing damage to charge air distributor.

Figure 10 (8/1A): Detail of damage to charge air distributor.
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Figure 11 (08/22A): Damage to starboard side crank case door frame.

Figure 12 (08/16A): Exhaust flange connections - viewed from aft port side.
Figure 13 (8/13A): Exhaust flange connections showing retained studs (2 outlined in lower flange and one arrowed in upper flange).
Figure 14 (8/15A): Detail of retained studs in upper and lower exhaust manifold flanges.

Figure 15 (8/5A): Top aft starboard corner of engine block showing gauge mounting location.
Figure 16 (8/3A): Engine valve stems and springs viewed forward from engine’s aft end.
Figure 17 (8/4A): Detail of aft end valve stems.

Figure 18 (8/12A): Starboard aft engine side showing missing cover plate at the figures right side (fracture direction of stud arrowed) and mounting flange upper left-hand side of figure.
Figure 19 (8/10A): Detail of cam shaft drive cover location.
Figure 20 (8/11A): Detail of mounting flange shown in figure 18.

Figure 21 (8/23A): Turbocharger showing exhaust gas side casing and shafting to charge air compressor side.
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Figure 22 (3/3A): Detail of turbocharger showing fractured rim of casting.

Figure 23 (3/2A): Detail of turbocharger showing fractured cover-plate.
Figure 24 (N5055): Micrograph x50, specimen unetched. Section from turbocharger case mounting flange, showing graphitisation corrosion (left of field) and graphite morphology.

Figure 25 (N5056): Micrograph x100, specimen etched in Nital. Section from turbocharger case mounting flange, showing pearlitic matrix and graphite morphology.
Figure 26 (N5057): Micrograph x50, specimen unetched. Section from turbocharger cover plate, showing graphitisation corrosion (left of field) and graphite morphology.

Figure 27 (N5058): Micrograph x200, specimen etched in Nital. Section from turbocharger cover plate, showing pearlitic matrix and graphite morphology.
Figure 28 (04/16A): Engine front starboard side.

Figure 29 (02/19): Detail of front starboard side damage, showing pebble trapped behind upwardly bent foundation plate.
Figure 30 (03/7A): Detail of trapped pebble and backwardly deformed stiffener plate.

Figure 31 (02/17): Detail of upwardly bent forward starboard side engine foundation plates.
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Figure 32 (03/14A): Engine starboard side showing upwardly bent foundation plates.

Figure 33 (03/13A): Engine starboard side showing upwardly bent foundation plates.
Figure 34 (03/12A): Engine starboard side showing upward bending of foundation plates.

Figure 35 (04/24A): Detail of engine starboard side showing bent foundation plates and stiffener.
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Figure 36 (06/13A): Propeller blade number 3, showing damage to tip.

Figure 37 (06/17A): Second propeller blade number 2, showing damage to tip.
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Figure 38 (06/20A): Propeller blade number 1, showing tip bending damage and fracture in root.

Figure 39 (06/22A): Detail of fracture origin in propeller casting root.
Figure 40 (06/23A): Detail of fracture in propeller casting root, showing fast brittle fracture chevron markings.

Figure 41 (02/9): Propeller cone internals.
Figure 42 (06/12A): Detail of propeller cone internals, showing severe local mechanical contact damage (arrowed).

Figure 43 (01/8A): Aft end of keel showing bending damage.
Figure 44 (6/00A): Rudder blade showing site of bending damage - piece removed during earlier examinations.

Figure 45 (06/5A): Detail of bent lower aft corner of rudder blade - piece removed during earlier examinations.
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Figure 46 (7/13A): Rudder stock and pilot motor - viewed from the port side.

Figure 47 (7/18A): Detail of fractured pilot motor hydraulic pipe connections.
Figure 48 (7/23A): Detail of rudder stock to bolting flange weld sites.

Figure 49 (7/22A): Detail of rudder stock to bolting flange weld sites.
Figure 50 (1/24A): Deck doubler plate and trawl winch service pipes.

Figure 51 (1/24+1): Deck doubler plate and trawl winch service pipes.
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Figure 52 (01/3A): V-belt drive pulley.

Figure 53 (N5095): Micrograph x100, specimen unetched. Section from drive pulley, showing extensive (total) graphitisation corrosion and prior flake graphite morphology.