

Rpt. 4.

No. 72158

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 25 OCT 1947

Date of writing Report 19 When handed in at Local Office 1/10/1947 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 7 Feb 1946 Last Survey 18 Sept 1947
 Reg. Book 26497 on the Single Screw Steamer CRAFTSMAN Tons Gross 4726 Net 3993
 Built at Port Glasgow By whom built Lithgows & Co. Yard No. 1020 When built 1947
 Engines made at Glasgow By whom made David Rowan & Co. Engine No. 1198 When made 1947
 Boilers made at Glasgow By whom made David Rowan & Co. Boiler No. 1198 When made 1947
 Registered Horse Power 1286 Owners T. & J. Harrison Port belonging to Liverpool
 Nom. Horse Power as per Rule 1286 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which vessel is intended Open Sea Service

ENGINES, &c.—Description of Engines Triple Expansion with Lgd. coupled Pist. Valve Revs. per minute 82
 Dia. of Cylinders 29 x 47 x 81 Length of Stroke 54 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 16 1/4 Crank pin dia. 16 1/4 Crank webs Mid. length breadth 26 Thickness parallel to axis 10 3/4
 as fitted 16 1/4 Mid. length thickness 10 3/4 shrunk Thickness around eye-hole 7 3/4
 Intermediate Shafts, diameter as per Rule 15.62 Thrust shaft, diameter at collars as per Rule 14.25
 as fitted 15.71 as fitted 14.25
 Tube Shafts, diameter as per Rule 17.161 Screw Shaft, diameter as per Rule 16 1/2
 as fitted 17.161 as fitted 16 1/2 Is the shaft fitted with a continuous liner Yes
 Bronze Liners, thickness in way of bushes as per Rule 26.4/32 Thickness between bushes as per Rule 19.8/32
 as fitted 7/8 as fitted 3/4 Is the after end of the liner made watertight in the propeller boss Yes
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Continuous
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes
 If two liners are fitted, is the shaft lapped or protected between the liners Yes Is an approved Oil Gland or other appliance fitted at the after end of the tube at No If so, state type Yes
 Length of Bearing in Stern Bush next to and supporting propeller 6'-0"
 Propeller, dia. 18'-6" Pitch 20'-0" No. of Blades 4 Material Bronze whether Moveable Yes Total Developed Surface 125 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 5 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 5 1/2 Stroke 24 Can one be overhauled while the other is at work Yes
 Feed Pumps No. and size 2 Main 1 Aux. All 307 G.P.H.R. Pumps connected to the Main Bilge Line No. and size 2-29 1/2 G.P.H.R. 1-907 G.P.H.R. 1-200 G.P.H.R.
 How driven Steam How driven Main Eng. Steam
 Ballast Pumps, No. and size 1-200 G.P.H.R. 1-907 G.P.H.R. Lubricating Oil Pumps, including Spare Pump, No. and size 2-10 1/2 x 11 1/2 x 18
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room E.P. 2-2 1/2 2-3 1/2 In Holds, &c. 170 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 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1504. 1505. 1506. 1507. 1508. 1509. 1510. 1511. 1512. 1513. 1514. 1515. 1516. 1517. 1518. 1519. 1520. 1521. 1522. 1523. 1524. 1525. 1526. 1527. 1528. 1529. 1530. 1531. 1532. 1533. 1534. 1535. 1536. 1537. 1538. 1539. 1540. 1541. 1542. 1543. 1544. 1545. 1546. 1547. 1548. 1549. 1550. 1551. 1552. 1553. 1554. 1555. 1556. 1557. 1558. 1559. 1560. 1561. 1562. 1563. 1564. 1565. 1566. 1567. 1568. 1569. 1570. 1571. 1572. 1573. 1574. 1575. 1576. 1577. 1578. 1579. 1580. 1581. 1582. 1583. 1584. 1585. 1586. 1587. 1588. 1589. 1590. 1591. 1592. 1593. 1594. 1595. 1596. 1597. 1598. 1599. 1600. 1601. 1602. 1603. 1604. 1605. 1606. 1607. 1608. 1609. 1610. 1611. 1612. 1613. 1614. 1615. 1616. 1617. 1618. 1619. 1620. 1621. 1622. 1623. 1624. 1625. 1626. 1627. 1628. 1629. 1630. 1631. 1632. 1633. 1634. 1635. 1636. 1637. 1638. 1639. 1640. 1641. 1642. 1643. 1644. 1645. 1646. 1647. 1648. 1649. 1650. 1651. 1652. 1653. 1654. 1655. 1656. 1657. 1658. 1659. 1660. 1661. 1662. 1663. 1664. 1665. 1666. 1667. 1668. 1669. 1670. 1671. 1672. 1673. 1674. 1675. 1676. 1677. 1678. 1679. 1680. 1681. 1682. 1683. 1684. 1685. 1686. 1687. 1688. 1689. 1690. 1691. 1692. 1693. 1694. 1695. 1696. 1697. 1698. 1699. 1700. 1701. 1702. 1703. 1704. 1705. 1706. 1707. 1708. 1709. 1710. 1711. 1712. 1713. 1714. 1715. 1716. 1717. 1718. 1719. 1720. 1721. 1722. 1723. 1724. 1725. 1726. 1727. 1728. 1729. 1730. 1731. 1732. 1733. 1734. 1735. 1736. 1737. 1738. 1739. 1740. 1741. 1742. 1743. 1744. 1745. 1746. 1747. 1748. 1749. 1750. 1751. 1752. 1753. 1754. 1755. 1756. 1757. 1758. 1759. 1760. 1761. 1762. 1763. 1764. 1765. 1766. 1767. 1768. 1769. 1770. 1771. 1772. 1773. 1774. 1775. 1776. 1777. 1778. 1779. 1780. 1781. 1782. 1783. 1784. 1785. 1786. 1787. 1788. 1789. 1790. 1791. 1792. 1793. 1794. 1795. 1796. 1797. 1798. 1799. 1800. 1801. 1802. 1803. 1804. 1805. 1806. 1807. 1808. 1809. 1810. 1811. 1812. 1813. 1814. 1815. 1816. 1817. 1818. 1819. 1820. 1821. 1822. 1823. 1824. 1825. 1826. 1827. 1828. 1829. 1830. 1831. 1832. 1833. 1834. 1835. 1836. 1837. 1838. 1839. 1840. 1841. 1842. 1843. 1844. 1845. 1846. 1847. 1848. 1849. 1850. 1851. 1852. 1853. 1854. 1855. 1856. 1857. 1858. 1859. 1860. 1861. 1862. 1863. 1864. 1865. 1866. 1867. 1868. 1869. 1870. 1871. 1872. 1873. 1874. 1875. 1876. 1877. 1878. 1879. 1880. 1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908. 1909. 1910. 1911. 1912. 1913. 1914. 1915. 1916. 1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026.

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Dates of Survey while building
During progress of work in shops -
During erection on board vessel - - -
Total No. of visits 85.

Dates of Examination of principal parts—Cylinders 10.12.46 Slides 10.12.46 Covers 10.12.46.
Pistons 12.12.46 Piston Rods 12.12.46 Connecting rods 12.12.46.
Crank shaft 6.11.46 Thrust shaft 6.2.47. Intermediate shafts 14.12.46
Tube shaft 14.7.47 Screw shaft 12.2.47 Propeller 12.2.47
Stern tube 14.7.47 Engine and boiler scatings 28.5.47. Engines holding down bolts 16.7.47
Completion of fitting sea connections 20.5.47
Completion of pumping arrangements 10.9.47 Boilers fixed 10.6.47 Engines tried under steam 18.9.47.
Main boiler safety valves adjusted 27.8.47. Thickness of adjusting washers
Crank shaft material O.H.S. Identification Mark LR 14993. HAI. Thrust shaft material O.H.S. Identification Mark
Intermediate shafts, material O.H.S. Identification Mark LR 14993. HAI. Tube shaft, material Identification Mark
Screw shaft, material O.H.S. Identification Mark F 760. 26.4.46 Beam Pipes, material S Test pressure 660 lbf/sq. in. Date of Test Completed 14.8.
Is an installation fitted for burning oil fuel Yes. Is the flash point of the oil to be used over 150° F. Yes.
Have the requirements of the Rules for the use of oil as fuel been complied with Yes.
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. Yes. If so, have the requirements of the Rules been complied with Yes.
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Yes.
Is this machinery duplicate of a previous case. Yes. If so, state name of vessel J.S. DALESMAH (No. 11.1018).
General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of This Vessel has been constructed under
Special Survey & in accordance with the approved
plans. The materials & workmanship are good.
It has been satisfactorily installed in the vessel, tested
under full working conditions & found satisfactory.
The Machinery is in my opinion eligible for record
of H.L.M.C. 9.47, T.S.-C.L., 4 S.E. Boilers 220 lbf/sq. in.
Fitted for Oil Fuel 9.47, F.P. above 150°F,
Exhaust Steam Turbine.

The amount of Entry Fee ... £ 189.60 When applied for, 1 OCT 1947
Special ... £ : : When received, 19.
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : 19.

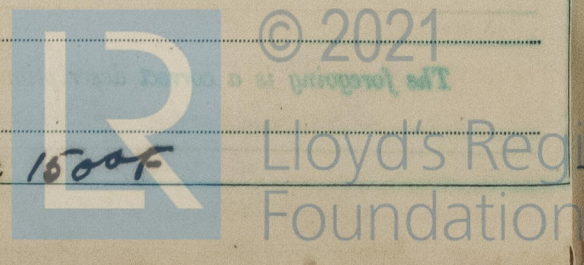
A. H. Lumsden
Engineer Surveyor to Lloyd's Register of Shipping.

Date GLASGOW 1 OCT 1947

Committee's Minute.

1/1 Linc 9.47

Fitted for oil fuel 9.47 F.P. above 150°F



Rpt. 4
MAR 1947
Date of
No. in
Reg. 1
Built
Engin
Boiler
Shaft
Nom.
Trade
STEAD
No. of
direct co
for suppl
rated
TURB
BLAD
1ST EXP
2ND
3RD
4TH
5TH
6TH
7TH
8TH
9TH
10TH
11TH
12TH
Shaft H
Rotor S
Distanc
TRANSM
Flexible
Shafts
Wheel S
Intermed
Screw SI
Thickness
made by fu
plastic ma
or other ap
Propeller
If Single
Condenser
Pumps co
Ballast P
Are two in
Pumps, No
In Holds, &
Main Wat
Bilges, No.
Are the Bil
Are all Sea
Are they fire
Are they eac
What pipes p
What pipes p
Are all Pipe
Is the arrang
compartment