

(Received at London Office

8 JUN 1948

e Machinery of the Wood, Iron or Steel **T. S. S. ORONTES**

0099 Vessel built at Garrow By whom Vickers-Armstrong, Ltd When 1909-7

044 Engines made at Banow. By whom Pickles & Co. Young, Glasgow When 1927  
054N Rail when made (Main) 1929 (Donkey) -

Boilers, when made (Main) \_\_\_\_\_ (Boilers) \_\_\_\_\_  
 Owners Wright Steam Heat Co., Ltd. Owners' Address \_\_\_\_\_  
 (If not already recorded in Appendix to Register Book.)

Managers \_\_\_\_\_ Port Bombay Voyage Assam

If Surveyed Afloat or in Dry Dock at Southampton  
(State name of Dock.)

O. _____ Port _____	Date of last Survey and of Periodical Surveys.	Year and month of expiration of Survey.	(including date of N. B. of any)
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29. _____	_____	_____	_____

Examination and Repairs (if any) INTER. B.S. 1. 3. 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. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838.

ture and extent of examinations and subsequent actions taken, should be briefly  
pared from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly  
d of the report. State also the dates and initials of any letters respecting this case.....

ere the Surveyor has not made a special damage report he is required to state whether he offered his  
purpose, and why they were declined.

It made by anyone else? If so, by whom? ✓

ersonally go inside each Main Boiler separately and make a thorough examination at this time?

What parts of the Boilers could not be thus thoroughly examined?

5. in the absence of internal examination, were adopted by the  
e himself of the thorough efficiency of those parts of each Boiler?

internal examination of each boiler 2, 3, 4, 5, 7, 8, 3/48. No 6 - 4/48. Present condition of funnel(s) good.

Examine the Safety Valves of the Main Boilers? \_\_\_\_\_ To what pressure were they afterwards adjusted under steam? \_\_\_\_\_

Examine the Safety Valves of the Donkey Boilers? \_\_\_\_\_ To what pressure were they afterwards adjusted under steam? \_\_\_\_\_

Examine all the manholes, doors and their fastenings of the Main Boilers? Yes, and of the Donkey Boilers? ✓

Examine the drain plugs of the Main Boilers? ☒ , and of the Donkey Boilers? ☒

Has it now been drawn and examined? Yes Has it a continuous liner? Yes Is an approved oil retaining appliance fitted at the after end? No

Has the shaft now fitted been previously used? no Has it a continuous liner? yes

Is electric light and/or power fitted? Yes If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? *Please see Electrical Surveyors Report.*

complete, state what arrangements have been made for its completion and what remains to be done. *To complete M.S. Postlund*

c. Vessel placed in drydock, sea connections opened, examined with their

Fastenings. 8  
The ends of the planks are secured with twisted lances. Starboard line

work in way of stem gland packing and space shaft fitted. LLOYDS 465.

9. Old shaft pit to make for renewal of liner and to place on end a

on All turbines, casing & rotors ashore for repairs, opened up, cleaned

aided as found necessary and refilled or topped. All in the grading truck  
 & 100% of the material shall be placed in the truck and be placed in the truck

nd. Back pop. standard main Condenser's back lay co. H. S. S. / Steam f.

Remainder of engine & auxiliary steam pipes examined & tested. All OK.

4th. The color of this vessel as now seen is

ly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, BS 9.11, BAMS 9.11, KLMC 9.11 or KLMC 140 lb., FD, &c.)

safe working condition and is eligible in our opinion to remain as classed

sl. record of BS 5.48, T.S. p. 1.48C.L. S.N. 1.48C.L. now and MS. 5.48

The survey has been completed.

Section 29) *Electric Co. etc.* £ *62* : *8* : *0* Fees applied for  
*7/6/1948*

Repair Fee of any Section 29.)  
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 Received by me  
 J. A. Boster

uses (if chargeable) *Jan. 1912* 18:10:2 1912

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Deferred for Whip Ths.  
but: Bl 548

Part 148

Stud. S. N. 1, 48

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T.S.S. ORONTESMachinery continued:

No 2 bilge pump opened up & examined. Steering engine opened up & examined, windlass engine opened up & examined. Pumping arrangement examined & tested. Boilers: All boilers examined throughout with their safety valves, dome mountings & found in order. Boilers examined under steam and their safety valves adjusted to 215 lbs. Oil fuel installation examined & tried under working conditions. Firefighting appliances examined & tested. Electrical: Please see Electrical Engineer's report, now attached.

W & T Repairs:

All turbines removed from vessel and sent to Messrs. J. D. Thorneycroft Works, for repairs. All turbines opened up, rotors & casings examined and following repairs carried out.

Port Starboard H.P. turbines:

Rotors: 3rd, 4th & 5th expansions reaction blading & 1st row impulse blading cut out & renewed. Rotor band skinned in lathe and grooves for blading recut. Old labyrinth gland ships cut out and renewed. Journals & thrust faces skinned up. New rotary baffles (water throwers) fitted and fixed oil baffles modified to suit rotary baffles. Claw coupling faces & coupling teeth trued up. Rotors dynamically balanced on completion of repairs. Casings: 3rd, 4th & 5th expansions reaction blades & 1st row impulse blades cut out & renewed. Casings bored to remove erosion in way of grooves, & grooves recut for new blades. Horizontal joint faces planed up. Hozle plates renewed, studs renewed, center angle plate renewed & others refitted. Stemming cylinders renewed completely. Rotor bearings remounted, thrust pads refaced. New labyrinth gland packing fitted. Reaction blading renewed in one metal. In place in Hatfield Works A.T.V. (Stanley Steel)

Port Starboard L.P. turbines:

Rotors: All reaction blading renewed. Rotors skinned in lathe. Grooves machined. Journals, thrust & gland paths skinned. Claw coupling faces & coupling teeth trued up. New rotary baffles fitted & fixed oil baffles modified to suit. Rotors dynamically balanced on completion of repairs. Casings: All reaction blading renewed, casings bored to remove erosion in way of blade grooves & grooves re-machined. Horizontal joint faces planed up. Rotor bearings remounted, thrust pads refaced.

Port L.P. bottom casing, metal found porous at bottom, now cut out and steel plate patch made & securely fitted outside of casing and blade grooves re-machined. Drawing No 627/06, showing this repair is attached. Rotor & casing blades renewed in brass.

Port Starboard H.P. turbines:

Rotors: 1st row of impulse blading in port rotor and all 12 rows ahead reaction blading in port & starboard rotors renewed. Rotors placed in lathe and ahead bands skinned to remove erosion at blade roots & grooves re-machined. Journals, thrust faces & gland paths skinned. All labyrinth packing renewed. Aster blading cleaned & dressed up. New rotary baffles fitted & fixed baffles modified to suit.

Continued.



t of SOUTHAMPTON

## T.S.S. 'ORONTES'

No. 3. Repairs continued: - Port Starboard turbines.

Port starboard rotor dynamically balanced on completion.

Bearings: 1st & 2nd rows of reaction. Blading renewed. Casing bored in way of blade grooves to remove corrosion. Blade grooves re-machined. Mating joint faces planed up. Port bearings re-installed. Thrust pads refaced & tapered packing strips renewed.

General: Spare frames for all turbines re-installed & re-bored. Gips supplied for bedding carbon segments for all turbines to suit new diameter of rotor shafts.

Gearing: Main gearing renewed completely. All main gear case bearings re-installed, including spare bearings, and gear wheels pinion shafts bedded.

On completion all turbines closed up in shop and lifted on board. Lined up & securely fitted. All lubricating pipes, strainers cleaned and refitted. Engine seating examined when all turbines removed. Steam pipes & exhaust pipes removed for removal of turbines examined internally & found in order.

On completion of repairs, boilers, main and auxiliary machinery and pumping arrangements tried under full working conditions on sea trials and are found in order.

J. M. D. C.



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Lloyd's Register  
Foundation



T. S. S. "ORONTES"

Electrical Installation Now Done:- Electrical special Survey complete.

Repairs:-

The electrical equipment of this vessel has been revised in accordance with the original plans, with the exception, that, the main cables and engine room wiring are of the original installation.

All electrical drives have been stripped, overhauled and commutators skimmed where necessary.

The galley cooking equipment has been overhauled and new heating elements fitted and the following additional equipment installed:-

A new sewerage pump motor of 6 B.H.P. has been installed aft to cater for the new accommodation.

New Ventilation Fans:- Thirteen at 1.5 B.H.P.; seven at 2.75 B.H.P. and one at 1.25 B.H.P. and the following fans are now redundant:-

64 P.F., 65 P.F., 22 S.F., 23 S.F., 15 P.F., 17 P.F., 19 P.F., 16 P.F., 18 P.F., 20 P.F., 9 P.F., 10 P.F., 11 P.F., 13 P.F., 14 P.F., 2 P.F., 4 P.F., 6 P.F., 8 P.F., 3 P.F., 5 P.F., 7 P.F., 25 A.P.F., 50 P.F., 50 P.F., 50 A.P.F., 26 P.F., 26 A.P.F., 23 P.F., 24 P.F., I.E.L.

All rewiring has been carried out in "H.R." flame proof braided cable where run in the open and has been protected from mechanical damage as required.

Insulation tests have been made on the finished installation and electrical drives, Generator protection tested, and equipment examined under working conditions and all found satisfactory.

J. H. Tirkell

A Radar Equipment has been installed and it is described as "MARCONI RADIO LOCATOR".