DEPARTURE TIME, 1300 HOURS, FRIDAY.



Edinburgh Castle on 102 berth

The Union-Castle Line inaugurated a weekly service from Southampton to Cape Town in 1936, the passage time being 13.5 days, and this ran until the outbreak of WW2. Sailing time was the much publicised "Every Thursday at 4.0 o'clock". After the war the service –requiring eight mail ships - resumed in October 1950 and continued until the sailing of Stirling Castle on 8 July 1965 when an "accelerated service" was introduced using only seven ships running at a higher speed and reducing the passage time to 11.5 days. This service was intended to be provided by the first post war rebuilds, Edinburgh Castle and Pretoria Castle, the "new" Pendennis, Windsor and Transvaal Castles plus the two new cargo mail ships, Southampton Castle and Good Hope Castle. In the event, delivery of Good Hope Castle was delayed by a builder's



Good Hope Castle on her final call in Capetown

dispute and she did not enter the service until January 1966. In the interim Capetown Castle took the scheduled sailing. Departure time from Southampton was 1300 hours every Friday and the new service commenced with the sailing of Windsor Castle on 16 July 1965.



Windsor Castle on 101 berth

To the outsider this may have looked like a very smooth and simple operation but it was achieved only by the skills of, and a high degree of cooperation between, the various Company Departments –Technical, Cargo, Marine and Catering.

Inevitably, behind the scenes there were "problems" and a few of them, with the solutions that enabled us to maintain an almost uninterrupted service, are outlined below.

When the Edinburgh and Pretoria were built in 1948, 17 years previous, the faster service was under consideration and it was thought that these two ships would be hard pressed to maintain the higher speed required; to offset this problem both ships were drydocked, the underwater hulls grit blasted and the overlapping shell plating butts were "streamlined" with epoxy resin fillets to reduce hull friction. From time to time these fillets needed partial renewing but these older ships invariably maintained the service speed required.



Windsor Castle (1960) and Transvaal Castle (1961), built in different shipyards and having different main boilers, had identical power from Pamatrada turbines. In this respect they were considered (technically) to be "sister ships" and hence only one pair (LH & RH) of spare 4 bladed propellers was kept at

one pair (LH & RH) of spare 4 bladed propellers was kept at the KGV drydock in Southampton. However, although of identical powers, the hull forms differed and Windsor had 4 bladed propellers whilst Transvaal's were 6 bladed.

On one homeward passage Transvaal reported vibration on one shaft and reduced RPM until she docked. An emergency drydock revealed that one blade of one propeller had broken off. There was no alternative but to replace this six bladed propeller with the four bladed spare and to our relief the ship operated for many voyages with non matching propellers without any problem.

(It was later revealed through metallurgical examination that the propeller manufacturer had changed a material specification to our disadvantage and so they provided a replacement propeller without charge.)

During one Southampton "in port" period Pendennis Castle had been fitted routinely with a new superheater element in one boiler. This needed many "in situ" welds (and, consequently, several hydraulic tests) thus using up the ships distilled water reserve. Normally, the pre sailing routine included the operation of the evaporators to replenish this reserve but due to a misunderstanding this did not take place and the shortage was only appreciated a few hours before sailing time. To avoid delay the ship sailed at 1300 hours as scheduled, using only two of her three boilers, but off Portsmouth Harbour she anchored (most passengers were having lunch by now!) whilst a prearranged RN water boat brought out a supply of distilled water.



Pendennis Castle rounding Calshot Light Vessel Picture courtesy of the artist, L.Sinclair, www.lsinclair.btinternet.co.uk

Pendennis Castle was undergoing an accommodation upgrade during a Southampton in-port period and this necessitated the shutting down of one section of the sprinkler system to modify pipe work. A fire broke out in the accommodation section concerned and major fire brigade units were called. The amount of fire fighting water used caused the ship to list and, to avoid a capsize, the fire brigade had to be advised to stop using the monitors on the two firefighting tugs fighting the fire from seaward. Shortly afterwards, using conventional methods, the fire was extinguished and the transfer of bunkers restored the ship to the upright. The gutted accommodation was panelled off and the ship sailed on schedule the following week but it took three in port periods to repair the damage. A major headache was removing the smell of smoke from the air conditioning trunking and this was achieved by installing large quantities of "air freshener" throughout the trunking!



Transvaal Castle at 102

Transvaal Castle had carried out a normal dock trial on the Thursday before sailing (our standard practice) but after the gangway had been removed on the Friday at 1300 hours it was discovered that one of the main turbine manoeuvring valves was stuck shut! Technical staff and some workmen from our ship repairer reboarded and, with great difficulty and in very hot conditions (the valve was at 750 degrees F), the valve was opened up and it was revealed that the internal sleeve had moved position, something new to us. Fortunately we had a spare sleeve which was cooled down in the refrigeration brine room and fitted to the valve which then operated correctly. The Area Director had demanded that we declare how long the repair would take (this before we knew what the problem was) and we made a guess at 3 hours. The job was actually finished in 2.5 hours but we stuck to our guess and were later congratulated on our accuracy! This was one occasion when sailing WAS delayed but that ship easily made up the time.

During another "in port" period of Transvaal a bunker instanter valve needed to be overhauled. The repair yard fitters concerned did not act as instructed and this resulted in a massive oil spill into the alternator room bilges, heavy fuel oil to a depth of about 12 inches. It took the rest of the in port period to clean up the mess but sailing was not affected.

On one voyage Windsor Castle shed the HP turbine blades on one engine and this necessitated removal of the turbine rotor for reblading in Glasgow. The turbine casing was secured, emergency bypass pipes fitted and the ship kept schedule for at least two round trips before the turbine was refitted - and this with no loss of speed but with increased fuel consumption due to loss of efficiency.

As the Cape Mail service included the carriage of large quantities of refrigerated cargo (e.g. Transvaal Castle had 361,000 cu.ft. of refrigerated space) it was our practice to schedule all drydockings in the winter when the fruit trade was low. The ships had been designed at build for rapid removal of propellers and withdrawal of tailshafts and this included the provision of an electric capstan in the tunnel space, narrow gauge railway tracks and bogies beneath the shafting and transverse girders to stow drawn shafts. Our ship repairer, Harland and Wolff (and later Vosper Thorneycroft) were well practiced in our plans and this resulted in our standard arrangement that if a ship was docked solely for cleaning and painting and perhaps some sea valve work then a period of 2.5 days "dry" (dock pumped down to flooding) was allowed but tail shaft withdrawal (both) required 4 days "dry". These extremely short docking times were almost always achieved and it is known that other passenger ship operators using the port did not understand how this was done! If stabilizer overhaul was required (in KGV dock only) then one stabilizer fin was removed at one docking and replaced at the next docking and the stabilizing system adjusted to give righting moments with only one blade extended. Hence it took 4 years (4 dockings) to overhaul a pair of stabilizer fins. (Windsor, Transvaal and Pendennis only).

David Aris, Technical Manager, Union Castle Line. 1967-1976.



Southampton Castle passing boat show pontoons off Mayflower Park on her final outward trip