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NORWEGIAN CRUISE LINE

Interoffice M E M O

File:

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Distribution: Bruce Nierenberg  
Jan Trollerud

From: Svenn Dahl

Location: Cruise Operations

Date: November 19, 1997

Subject: S/S Norway - Future

The S/S Norway is/has been the flag ship of N.C.L. since 1980 when she first came out. She has sailed almost 17 years with a lot of happy passengers and with good revenue for N.C.L.

Over the past years few years we have not treated the "old lady" in the manor which she deserves and therefore she is a little tired.

It is not good enough to do only "cosmetic" work, she needs heart surgery. Her boilers have a lot of plugged tubes and the economizers have by pass tubing. We need to start a re-tubing program next year.

We have had extensive technical surveys done by several different companies. We have looked into six different scenarios, all based on maintaining a safe and economical operations and to be able to obtain a speed of approximately 28 to 30 knots.

Alt. 1:

4 new boilers and new propellers ~ 18 Million U.S.

Alt 2:

New boilers, same type as S/S United States and 4 new propellers ~ 26.8 Million U.S.

Alt 3:

Install gas turbines in forward turbine room and connect 4 new propellers (booster system) ~ 31 Million U.S.

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Alt 4:

Five (5) diesel generators connected to water jet (booster system) ~ 31 Million U.S.

Alt 5:

Total new boilers and total new Electric Motors for propulsion and new propellers ~ 50 Million U.S.

Alt. 6:

Re-tube 4 existing boilers and economizers and install 2 new propellers ~ 8 Million U.S.

Alt. 6 can be done partially during the European sailing of 1998, if so desired, with a docking at the end of the season to install new propellers; or the re-tubing of the 4 boilers can be done during 1998 and the new propellers can be mounted during dry-dock 1999.

Two boilers will be re-tubed during 1998 for maintenance and operational safety reasons anyway.

The different quotes are from:

1. Deutsche Babcockl
2. ABB "Sunrod" Industrietechnik
3. General Electric
4. MAN/B & W
5. Lloyd Werft
6. Kamewa
7. Harris Pye

  
SD:dg

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