

## ABSTRACT

**Didik Kurniawan**, 2018, NIT : 50134993.T, “Identifikasi penyebab *connecting rod auxiliary engine* no. 2 MT. PLAJU yang lepas pada saat proses *discharge cargo* di pelabuhan tanjung manggis bali”, skripsi Program Studi Teknika, Program Diploma IV, Politeknik Ilmu Pelayaran Semarang, Pembimbing I : F. Pambudi Widiatmaka, ST., M.T dan Pembimbing II : Tony Santiko, S.ST., M.Si.

On board the MT. PLAJU, auxiliary engines are generally on boats there are 3, which run in parallel alternately serves as a power source on board. Because of the importance of the function of the auxiliary engine it must be on guard peformanya, ranging from fuel, cooling oil fresh water or sea water, and conditions of vibration and sound when auxiliary engine running. If the auxiliary engine running is not normal even not running it will be very disturbing ship operations.

SWOT analysis is an acronym or abbreviation of 4 words of Strengths, Weakness, Opportunities, and Threats. SWOT analysis is one of the methods used to evaluate strengths, weaknesses, opportunities (Opportunities), and threats (Fajar Nur'aini, 2016: 7). In its factor division, it is generally divided into two parts, namely internal factors and external factors. Strengths and weaknesses are present in internal factors, while opportunities (Opportunities) and threats exist in external factors.

The results obtained from this research that the cause of loose connecting rod on auxiliary engine is due to fatigue material. While the cause of fatigue is caused by the lack of availability of auxiliary engine spare parts on the vessel so that the process of PMS (Planning Maintenance System) is not running well then forced the auxiliary engine running continuously until running through running hours recommended in the manual book.

**Keywords: auxiliary engine, planning maintenance system, running hours.**