ABSTRAK

Perkembangan teknologi ruang angkasa telah mendorong negara-negara besar untuk memanfaatkan ruang angkasa tidak hanya untuk tujuan ilmiah, tetapi juga untuk kepentingan militer. Salah satu bentuk pemanfaatan tersebut adalah pengembangan dan uji coba senjata *Anti-Satellite (ASAT),* yang meskipun tidak secara eksplisit dilarang oleh *Outer Space Treaty (OST) 1967*, menimbulkan dampak serius terhadap stabilitas politik, hukum, dan lingkungan ruang angkasa. Uji coba senjata ASAT menghasilkan *space debris* yang mengancam keselamatan satelit aktif dan misi ruang angkasa lainnya. Penelitian ini bertujuan untuk mengetahui dan menganalisis bagaimana implikasi penggunaan *Anti-Satellite (ASAT)* untuk kepentingan militer di ruang angkasa dengan mempertimbangkan prinsip-prinsip perdamaian dan keamanan internasional. Mengetahui dan mengidentifikasi bagaimana pertanggungjawaban negara-negara peluncur dalam menghadapi sampah antariksa akibat penggunaan senjata militer *Anti-Satellite (ASAT)*. Metode penelitian yang digunakan adalah yuridis normatif dengan pendekatan *statutory approach* dan *case approach*. Hasil penelitian menunjukkan bahwa penggunaan senjata *Anti-Satellite (ASAT*) untuk kepentingan militer membawa dampak serius terhadap stabilitas politik global, kepastian hukum internasional, dan kelestarian lingkungan luar angkasa. Celah hukum dalam *Outer Space Treaty (OST) 1967* memungkinkan negara-negara mengembangkan dan menguji senjata *Anti-Satellite (ASAT*), yang berkontribusi pada peningkatan debris dan risiko *Kessler Syndrome*. Berdasarkan *Outer Space Treaty (OST) 1967* dan *Liability Convention 1972*, negara peluncur bertanggung jawab atas aktivitas luar angkasa, dengan rezim pertanggungjawaban yang mencakup *strict liability* dan *fault-based liability*. Uji coba *Anti-Satellite (ASAT*) bertentangan dengan prinsip kerja sama internasional dan asas *'The Province of All Mankind'*. Oleh karena itu, dibutuhkan pembatasan penggunaan *Anti-Satellite (ASAT)*, peningkatan transparansi, serta kerja sama internasional yang berkelanjutan dalam rangka menjaga keamanan dan keberlanjutan ruang angkasa di masa depan.

Kata Kunci : *Anti-Satellite (ASAT)*, Sampah Antariksa, Hukum Ruang Angkasa.

ABSTRACT

The advancement of space technology has encouraged major nations to utilize space not only for scientific purposes but also for military interests. One such utilization is the development and testing of Anti-Satellite (ASAT) weapons, which, although not explicitly prohibited by the Outer Space Treaty (OST) of 1967, poses significant risks to political stability, international legal certainty, and the sustainability of the space environment. The testing of ASAT weapons results in space debris, which threatens the safety of active satellites and other space missions. This study aims to analyze the implications of military use of Anti-Satellite (ASAT) weapons in space, considering international peace and security principles. It also seeks to identify and assess the responsibility of launching states in dealing with space debris resulting from military ASAT weapon use. The research method used is normative juridical, with statutory and case approaches. The findings indicate that the military use of Anti-Satellite (ASAT) weapons significantly impacts global political stability, international legal certainty, and the sustainability of the space environment. Legal gaps in the Outer Space Treaty (OST) of 1967 enable nations to develop and test ASAT weapons, contributing to increased debris and the risk of the Kessler Syndrome. According to the OST of 1967 and the Liability Convention of 1972, launching states are responsible for space activities, with a liability regime that includes strict liability for damage on Earth and fault-based liability for damage in outer space. The testing of ASAT weapons contradicts the principles of international cooperation and the principle of "The Province of All Mankind." Therefore, there is a need to limit the use of Anti-Satellite (ASAT) weapons, increase transparency, and ensure ongoing international cooperation to safeguard the security and sustainability of space for the future.

Keywords: Anti-Satellite (ASAT), Space Debris, Space Law.