

INTISARI

Keberadaan suatu bandara pada suatu wilayah memiliki dampak yang positif pada perkembangan dan pertumbuhan ekonomi untuk daerah sekitarnya. Disisi lain bandara juga memiliki dampak negatif. Beberapa efek seperti kebisingan, getaran serta resiko bahaya kecelakaan. Penggunaan lahan yang tidak terkendali dapat memiliki konsekuensi pada keselamatan operasi penerbangan. Penelitian ini mencoba untuk mengidentifikasi kesesuaian lahan untuk rencana pembangunan bandara baru di Kulon Progo Yogyakarta. Unsur yang dinilai terkait dengan isu-isu keselamatan dan masalah kebisingan. Permasalahan yang berhubungan dengan keselamatan diantaranya kawasan keselamatan operasi penerbangan dan zona bahaya satwa liar.

Penelitian ini menggunakan metode yang mengacu kepada ICAO Annex 14 dan SNI 037112-2005 untuk penentuan batas kawasan keselamatan operasi penerbangan, sedangkan untuk menentukan kawasan potensi *wildlife* / *Bird Hazard* mengacu kepada *Canada Transport Agencies Document TP 8240 – Airport Wildlife Management Buletin No. 38*, dan untuk menentukan Kawasan kebisingan menggunakan metode *Noise Exposure Forecast (NEF)* yang mengacu ke *CLM / System, Inc., 1972 Airport and their environment*. Kesesuaian lahan pada masing-masing kawasan diidentifikasi dengan menggunakan metode *overlay* pada peta penggunaan lahan.

Kecamatan Wates dan Purwodadi merupakan daerah yang termasuk kedalam semua kawasan baik Kawasan Keselamatan Operasi Penerbangan, Kawasan Potensi bahaya, dan Kawasan kebisingan NEF. Terdapat kawasan pemukiman penduduk terutama di sekitar kawasan *Approach and Take off area* yang dapat menimbulkan potensi gangguan penerbangan. Beberapa bangunan seperti rumah sakit, Sekolah dan tempat ibadah berada pada kawasan kebisingan NEF yang dapat berdampak pada gangguan kebisingan.

Kata kunci : Kesesuaian lahan bandara, penerbangan, kebisingan, keselamatan

ABSTRACT

The existence of an airport in the region has a positive impact on the development and economic growth for the surrounding area. On the other hand, airports also have a negative impact. Some of the effect such as noise, vibration, accident risk. Uncontrolled land use can have consequences on the safety of flight operations. This research tried to identification the compatibility of land to the planned construction of a new airport in Kulon Progo Yogyakarta. The element that is assessed related to the safety issues and noise issues. Safety issues includes a of safety flight operations zone and wildlife hazard zone

This research using method that refer to ICAO Annex 14 of Aerodrome and SNI 03-7112-2005 to determine Flight Operation Safety Zone, to determine the potential of wildlife / Bird Hazard refers to the Agencies Document Transport Canada TP 8240 - Airport Wildlife Management Bulletin No. 38, and to determine the area of noise using the Noise Exposure Forecast (NEF) which refers to the CLM / System, Inc., 1972 Airport and their environment. The compatibility of land in each region identified using the overlay method on the land use map.

District Purwodadi and Wates is an area that included into all areas of flight safety operation, Potential Hazard Zone as well as the Noise Exposure Forecast Zone. There is a residential neighborhood in the area of flight safety operation, especially in the area of take-off and approach area. It will have a tendency to high risk of danger of aircraft accidents, and raises the potential causes of accidents in flight operations at the Kulon Progo airport Yogyakarta Some civilian buildings such as hospitals, schools and places of worship included in the Noise Exposure Forecast Zone

Keywords: Airport land compatibility, aviation, safety, noise