

***INSPECTION OF DAMAGE OF SUNGAI KEMBUNG BRIDGE USING UAV
(Unmanned Aerial Vehicle) TECHNOLOGY REFERRING TO THE 2022
BRIDGE INSPECTION GUIDELINES***

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ABSTRACT

This study examines the use of UAV (Unmanned Aerial Vehicle) technology for bridge damage inspection, focusing on the Sungai Kembung Bridge in Kembung Luar Village, Bantan District, Bengkalis Regency. The main objective of the study is to assess the effectiveness of UAVs in detecting and classifying bridge damage according to the 2022 Bridge Inspection Guidelines. The methods used include direct field surveys using UAVs, as well as analysis of the data obtained to identify structural damage. The results of the study indicate that the use of UAVs improves the efficiency and safety of bridge inspections, reduces costs, and produces accurate and detailed data. This study makes a significant contribution to the use of modern technology for bridge infrastructure maintenance, especially in difficult-to-access environmental conditions.