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THE INFLUENCE OF EMERGENCY PREPAREDNESS ON RESPONSE STRATEGIES AT GENERAL AVIATION AIRPORTS IN KENYA

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DECLARATION AND CERTIFICATION

DECLARATION

This thesis is my original work prepared with no other than the indicated sources support, and has not been presented elsewhere for a degree or any other award.

Date 22ND JUNE, 2015

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CDM/H/08/11

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance of Masinde Muliro University of Science and Technology a thesis entitled "The Influence of Emergency Preparedness on Response Strategies at General Aviation Airports in Kenya".

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ABSTRACT

Airports are essential to normal economic activities within their regions and have become more important after an emergency. All over the world airports are, therefore, increasingly preparing for disaster eventualities by strengthening preparedness and response at all levels. The aim of this study was to analyze the influence of emergency preparedness on response strategies at the general aviation airports in Kenya and specifically evaluate the capacity to respond to emergencies, analyze the level of coordination and cooperation during response among emergency stakeholders and determine the managerial factors affecting successful implementation of safety management system for effective response at the general aviation airports. The study was conducted in the general aviation airports namely Wilson, Malindi and Lokichoggio with a total population of 227 emergency responders. A descriptive survey design was used to provide an accurate portrayal of the characteristics of the respondents. A sample size of 154 respondents' simple randomly sampled from the airports emergency response organizations were interviewed using a questionnaire. Participation was at individual level and confidentiality was maintained by securing their consent. Out of the 154 responses, 96% (147) answered all questions completely and were eligible for analysis. Document analysis and key informant interview were also used to corroborate responses given in the questionnaire. Qualitative data were coded and quantitative data analyzed using Microsoft Excel and SPSS software. Continuous variables were analyzed by Chi-square tests and p-values < 0.05 at 95% confidence interval was considered significant. Frequency responses were calculated and results presented in tables, bar graphs and pie charts. The study explored avenues for increased capabilities for effectiveness of responder organizations and 53% of the respondents indicated that the emergency preparedness and response plan was rarely revised with only 60% of the emergency responders trained on emergency management and 33% indicated drills were carried out every 6-12 months. Communication and coordination mechanisms during emergencies were not effective according to 39% of respondents and 71% of respondents indicated that there were no community outreach programmes. The study further found lack of normative and legal base for emergency response as was indicated by 95% of respondents and 68% of respondents indicated that training on safety management system was either lacking or inconsistent. Again 54% of respondents indicated that the management was ignorant of safety management system and lacked the commitment for implementation. The lack of proactive data collection and feedback, indicated by 44% of respondents, was also evident as roles and responsibilities were not adequately defined bringing confusion among emergency responders that operate in different organizations with different mandates at the airports and only merge during emergencies. Overall the general aviation airports in Kenya are not adequately prepared for emergency response. The study recommends the enhanced training on disaster preparedness and response and equipping the personnel, the operational aspects of the general aviation airports to be run by disaster managers and resources allocated effectively for safety management system implementation by the management at the general aviation airports in Kenya.