

ABSTRACT

Today, technology has been repetitively subjected to changes. So with the inception of technology and improvisation of the same, developments in embedded systems have sky rocketed and are fast approaching the zenith. As an effect of such change over the past several years NHTSA (National Highway Traffic Safety Administration) has been actively involved in using Event Data Recorders (EDR) in high end automobiles like flights, cars and some two wheelers like Kawasaki's Ninja. EDR's collect crash information which assists in real world data collection and also helps in understanding specific aspects of the crash. India ranks first in road accidents, for every 3.7 minutes road mishap snuffs out a life. What are the root causes for so many accidents to happen? Where are the details stored after the accident? Was there any fault with the motorcycle? How about false insurance claims? The proposed work addresses the above questions and aims to collect the information which aids investigations of causes of accident and helps in improvement of motorcycle standards. Information from this device can be collected to determine the condition of motorcycle before the time of accident. An embedded system is mounted on two wheelers which records the events like brake, gear, speed, stand and congestion. The results of analysis show that the recorders can report real world crash data and therefore be a powerful tool by providing useful information to crash reconstruction experts.

Keywords— Event Data Recorders (EDR's), false insurance claims, National Highway Transport Safety Administration (NHTSA), Kawasaki's Ninja