

Unmanned Systems in Urban Areas

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Abstract : The evolution of warfare has been affected from technological developments to a large extent. Another important factor that affected the evolution of warfare is the space. Technological developments became cornerstones for the organization of the forces on the field, while space of the battlefield gained importance with the introduction of urban areas as 'battlefields'. The use of urban areas as battlefields increased the casualty, while technological developments began to play a remedial role. Thus, the unmanned systems drew attention as the remedy. Today's widely used unmanned aerial vehicles have great effects on the operations. On the other hand, with the increasing urbanization, and the wide use of urban areas as battlefields make it a necessity to benefit from unmanned systems on the ground as well. This study focuses on the use of unmanned aerial systems as well as unmanned ground systems in urban warfare, with regards to their performance and cost affectivity. The study defends that the use of unmanned vehicles will be remedial for increasing casualty rates, while their precision and superhuman capacity will manifest the performance advantage. The findings of this study will help modern armies focus on unmanned systems, especially for the urban, anti-terror, or counter insurgency operations.

Keywords : technology, warfare, urban warfare, unmanned systems, unmanned ground vehicles, unmanned aerial vehicles

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