ABSTRACT
A simulation system of applying pulse radar system to a tracking system is developed in this project. Once the measurement signal is received, both signal processing and data processing techniques are executed to determine the quantity information of target, such as position, range rate and angles. Then the control processor sends such quantity information to control unit and fire system to determine whether keep tracking or destroy them. In this project, a tracking and defense system is developed. This will greatly help users to understand radar system more. A personal computer is the central control system for processing the tracking information. In order to solve the multiple target tracking problem, a data association algorithm is applied. We also try to develop an optimal method to identify the targets and to determine the destroying priority. We convince that this research will have a lot contribution for the defence system. Keywords : Digital Pulse Radar ; Data Associate Algorithm