

NAVAL WARGAME AND ITS EXTENSIONS

War games are simulations in which theories of warfare can be tested and refined without the need for actual hostilities. War gaming is one of the key concepts for war readiness. War game is a practice of actual operation. It can be executed as field operations and/or simulations. Field operations contain more risk and cost much more than simulations. Emerging technologies made it possible to develop more realistic simulations. If the training is closer to the reality, it will be the more effective.

NAWAS (Naval War Game Simulation) is an interactive, multi-force war gaming system that models a naval force in a total air, land, and sea warfare environment.

10 different types of warfares can be applied in NAWAS. Simulation planning, wargame control, platform management, command and control, tactical picture management, error and information display, map application, environmental conditions, analysis and reporting and communications are some of the features of the system. There are 35 sub-models in 5 main models including platforms, weapons, sensors, communications and counter measures.

NAWAS is a combination of a Wargame Framework and Model & User Interface Plugins. Framework includes a model execution engine, a simulation management engine and the user interface. Every model plugin supplies additional functionality to the system. Every UI plugin gives additional functionality to the users.

There are different numbers of server and terminal computers. The number of servers depend on the application level and other dynamic parameters of the war game. Generally four servers are enough for standard operations. Terminal computers can be divided into three functional groups: client (user/player) terminals, observer terminals and controller (administrator) terminals. The number of terminals can also be changed depending on the requirements. A configuration with 1 controller, 1 observer and 8 client terminals can be enough for standard operations.

NAWAS can be extended to other types of warfares or tactical level simulators.