

The Project for the Preservation of the El Alamein Battlefield (Egypt, 1942)

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The purpose of the Project is the preservation of the El Alamein battlefield area by the creation of a geographical database aimed at the historic, cultural and tourist exploitation of the sites in agreement with the Egyptian authorities.

The desert stretches between El Alamein and the El Qattara Depression have been affected in recent years by an ever increasing tourist presence, due to international resorts development of the El Alamein coastal areas. At the same time, oil prospecting activities have resulted in the spreading of new tracks, trenches and artefacts which have concerned, and in part modified, the most peculiar sites of the El Alamein battlefield (Ruweisat, Mitteriya, Deir El Munassib, Naqb Rala, Haret el Himeimat, Menaquir El Daba), together with the El Alamein built-up area and almost all of the sites along the coast and close to the littoral.

As a consequence, there is urgent the need to survey and document these areas before that transformation imposed over the territory shall result in the disappearing of such remarkable historical war remains.

In 1942, between the end of June and the beginning of November, a series of battles and war actions took place in the Egyptian Desert (namely, Western Desert), near the location known as El Alamein.

The third, and final, El Alamein battle began at 20.40 on October 23rd when the awaited British offensive started. After 12 days of hard fighting Montgomery's VIII Army broke into Rommel's defences, and the Axis troops began a long and difficult retreat which finally ended-up in Tunisia, in May 1943. During the battle, which lasted until November 4th, and the next few days, about 30,000 Italian and German prisoners were captured, while, as a whole, the Axis had 9,000 men killed or missed and 15,000 wounded. On the British side, Montgomery's VIII Army losses accounted for 13,560 killed, missed, or wounded men.

The project has been implemented setting up a Geographic Information System (GIS) and a cartographic base, as derived from high-precision satellite images. All the available cartographic documentation has been loaded as a background reference. Next, original aerial photographs, as taken from reconnaissance military aircrafts, were over-imposed, allowing comparison of defensive artefacts and man-made positions - recognisable at the time of the El Alamein battle - with today preserved emplacements, still visible on remotely-taken images. Maps and pictures were procured from military museums and documentation centres.

Several accurate onsite survey have been performed, with the aim of creating a photographic data bank, which will be integrated by geodetic Gps topographical plotting, by geomorphologic and geologic information, by studies on sedimentation processes, and by prospecting activities which shall help in locating possible artefacts and burial sites. A close collaboration with the National Institute for Oceanography and Geophysics (Trieste's Experimental Geophysics Observatory) will allow for the on-field use of the most advanced geophysics instruments (terrestrial geo-radar and magnetometers) with which to explore ground surface horizons and reveal aeolic fillings of defensive positions.

The Project El Alamein shall allow for the identification of all positions, tracks, digs, trenches and artefacts existing on the battle front. Direct sites inspection suggested by the analysis of aerial photographs and satellite images, and geo-physical researches, shall enable to uncover buried artefacts and military works, and to recover some of countless human remains which are still disseminated under the desert soil.

The El Alamein GIS will provide a paramount support for any future planning of the Western Desert cultural and tourist exploitation.