SARMAP RELEASE NOTES

Version: 7.0.4.0 (March 2019)
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1 INTRODUCTION

SARMAP Version 7.0.4.0 is the latest in search and rescue trajectory modeling software from RPS. SARMAP v7.0.4.0 includes enhancements and added features to help improve search and rescue response and exercises. SARMAP v7.0.4.0 has undergone updates to include enhanced functionality through industry driven research and development from coast guard and government agencies. This document describes the various new features included in SARMAP v7.0.4.0.

1.1 Operating System Compatibility

One of the most notable features of Version 7.0.4.0 is that all of the RPS ASA MAP applications, SARMAP, OILMAP, and CHEMMAP are now Windows 10 compatible. SARMAP is currently supported on the following Microsoft Windows platforms: Windows 10, 8, 7, and Windows Server 2012.

2 SARMAP V7.0.4.0 ENHANCEMENTS INTRODUCTION

A number of new enhancements to SARMAP are included in the latest release of the SARMAP search and rescue planning software. These developments include access to the live SRU database, as well as improvements to the calculation and display of the IAMSAR model results. A summary of the developments is indicated below:

2.1 Live SRU Layer

The Live SRU feature in SARMAP has been added to improve the incident response planning function of SARMAP. This new development, requested by the Spanish Coast Guard (SASEMAR), led to the inclusion of this helpful layer in SARMAP. The live layer displays search and rescue units (SRUs) geographically, with their associated SRU attributes (Speed, Endurance, and Range), overlaid on any base map. Each unit can be seamlessly added to the Fixed SRU tab and deployed in the user’s active scenario.

- The Live Data layers can be found in the first tab (GIS) in the Table of Contents (ToC) (see figure to the right).

This Live Data layer is automatically updated based on the most up to date data available on the server from which the data is sourced. No historical data is stored or available from the Live Data servers. Each end user’s SRU data can be integrated into SARMAP.

Note: Live layers are client specific and can be customized to suit user needs. For additional information contact us at MapSupport@rpsgroup.com.
2.2 Improved calculation of ABCD box when using IAMSAR method

In previous versions, the calculation of the ABCD box was made considering the drift error plus the error of the starting point of the event, and finally, a safety factor was applied that was left to the user to determine. However, this did not conform to the IAMSAR procedures, which in the calculation also include the effort of the Search Units that would be used.

The new calculation of the ABCD box includes the parameter "Optimal Search Factor" directly in the formulation, instead of applying a safety factor to the previously calculated rectangle.

Although the results vary very little during the first hours of drift, this difference increases with time because the "Optimal Search Factor" is greater when needing more "Cumulative relative effort".

For this reason, we must modify the "Safety Factor" to a maximum of 2.5, depending on the effort used in the search.
2.3 Changes to the calculation of the trackline for an IAMSAR case

The trackline has been modified such that it represents the center point of the three particles at every timestep. Previously, the trackline represented the center point of the ABCD box over time.

Figure 1. The scenario trackline now represents the center point of the three particles.

3 SARMAP V7.0.4.0 BUG FIXES

3.1 Search Pattern Box

Under certain circumstances, the Search pattern box was misaligned with the ABCD object drift box. See image below for an example of how these boxes were misaligned. This has now been resolved and the Search Pattern box always matches the ABCD box when select by the user.
3.2 Tracklines for Multiple Accident Sites

In certain scenarios with more than one accident site, there was an issue in which the second trackline was not displayed on the map. This has been corrected and now both tracklines appear.

Before, with error:
3.3  Fixes to SRU deployment form

There have been a variety of small improvements and fixes to the SRU Deployment form. The way the form saves inputs has changed such that user inputs aren’t reverted back to a default value. However, if the user chooses ‘Close’ rather than ‘Apply’ when closing out of the SRU form, any changes made by the user will not be saved.

Upon being changed, Search Speed in Endurance tab of Deployment form for Airplane defaults to 150 knots and Helicopter defaults to 60 knots. It has now been corrected to only use these default values if they are not defined by the user.

Fixed the possibility to choose the effective On-Scene Endurance. The “Lock” option was not working. Now the user can block the time effective On-Scene Endurance.

3.4  Fix to displaying GIS layers from older scenarios

Certain older scenarios, which have a GIS layer attached, would throw an error in SARMAP. This has now been corrected and those GIS layers do not throw an error.

3.5  Fixes to Departure or Arrival distances

Once the base of the SRU is established, both for departure or arrival, the distance calculated is not updated. In cases that you changed the size of search pattern area, the map did not update to the new number. This has now been resolved.

Figure 6. Once the base of the SRU is established, both for departure or arrival, the distance calculated is now updated.