



## **SAR Technology Inc.**

**5268 Sprucefeild Road  
West Vancouver,  
B.C., Canada,  
V7W 2X6**

<http://sarotechnology.ca>  
[sarotechnology@telus.net](mailto:sarotechnology@telus.net)

Phone: 604 921-2488

Fax: 604 921 2484



### **Curriculum Vitae of Martin John Colwell**

#### **President:**

- SAR Technology Inc. – Incident Management software and training for search, rescue and emergency response.

#### **Software Programs Developed:**

- Probability of Detection Calculator.
- Incident Commander Pro V7.0
- Incident Commander Pro V8.0
- ‘Mission Control’ SAR map-server website.
- ‘Global Earth Tools for Google Earth’ – module for ‘Incident Commander Pro’.
- ‘Track Commander’ – Android Responder-Tracking & Messaging smart-phone application.
- ‘Pattern Commander’ –Search Pattern app for ‘Incident Commander Pro’ & Google Earth.
- ‘Image Commander’ –Geo-referenced image overlays for ‘Incident Commander Pro’ & GIS.
- ‘Searchlight Image Locator’ - Online program detects SAR Targets in Mission Images.
- ‘POI Commander’ – Geo-locates, Groups, Plots, Reports and Displays Points Of Interest.
- Software currently in use throughout USA, Canada, South America, Europe, Africa and Australasia.

#### **SAR Experience:**

- Over 40 years experience as a Search & Rescue as Team Leader, Training Officer and Search Manager.
- Project leader for the SAR Incident Management System for the Province of British Columbia, Canada.
- Participated and managed hundreds of missions including Air Search, Mountain Rescue, Wilderness SAR and Urban SAR, worldwide.
- Provided response, training and search & rescue theory and practice in British Columbia, Ontario, Quebec, Nova Scotia, Northwest Territories, Washington State, Idaho, Alaska, California, Wyoming, Oregon, Washington DC, United Arab Emirates, West Africa, East Africa, Australia and New Zealand.



### **Project Manager:**

- ‘Integrated Search Management System’ for the Province of British Columbia, Canada.
- ‘GIS for SAR’ for the National Search & Rescue Secretariat, Ottawa, Ontario, Canada
- ‘Automated Position Reporting System’ for the National Search & Rescue Secretariat, Canada

### **Subject Matter Expert:**

- Subject Matter Expert for **US Air Force Laboratory** - Open Waters Search & Rescue Project.
- Contributor for **US Dept of Defense Joint Artificial Intelligence Committee** - SAR Drone Swarms with Artificial Intelligence.
- Contributor to the **NATO Innovation Hub** - ‘Searchlight Image Locator for Emergency Responders’

### **Papers and Presentations Published:**

- Aircraft Tracking – Technical Task Force Presentation (International Civil Aviation Organization)
- Creating Aircraft ‘Crash Maps’.
- Creating Aircraft ‘Debris Maps’
- New Concepts for Gridsearching. (Emergency Response Institute).
- Planning the Gridsearch - Probability of Detection Data (Emergency Response Institute).
- The Sound Sweep – An Efficient New Ground Search Tool (Emergency Response Institute).
- Search Priority – An Integrated Approach to Search Planning. (Emergency Response Institute).
- Trail-Based Probability of Area – A Terrain-based approach to POA Estimation.
- Incident Command System for Search & Rescue
- Unifying Geographic Search Assignments – Unifying Area and Trail Search Protocols.
- Search & Rescue Post-Mission Reviews – Procedures and Benefits of SAR Reviews.
- Managing the Urban Search (Emergency Response Institute).
- The Rapid Response Rule – How much searching is enough?
- Planning Urban Search Assignments (Emergency Response Institute).
- Urban Geographic Search Types (Emergency Response Institute).
- Missing Person Behaviour Profiles (Emergency Response Institute).
- Child-Abduction Searches (Emergency Response Institute).
- Probability Density Profiles – A New Perspective on Subject Behaviour.
- Walking the Tightrope - Managing Risk in SAR.
- Optimizing Search Effort Allocation.
- ‘Level of Search Effort’ for SAR Operations.
- Image Recognition for SAR Missions.

**Search Management Instructor & Operations:**

- Provincial Emergency Program - British Columbia.
- Emergency Response Institute - Washington State.
- Alaska State Troopers – Alaska.
- Oregon.
- Idaho.
- New Zealand.
- Australia.
- Middle East.
- North Africa
- West Africa.
- East Africa.

**Senior Contributor:**

- ‘Search is an Emergency’ Search Management Training Manual, by the Emergency Response Institute. Olympia, Washington, USA.
  - ‘Lost Person Behavior’ by Robert Koester. DbS Productions, USA.
-