

Risk Calculation Worksheet - Calculating Risk Using **GAR** Model (**GREEN-AMBER-RED**)

Assign a risk code of 0 (For No Risk) through 10 (For Maximum Risk) to each of the six elements below:

Element	Description of Element	Risk Score
Supervision	How closely do you need to supervise the crew/unit? The higher the risk the more a supervisor must focus on observing and checking.	
Planning	How much information is available, how clear is it, how much time is available to plan/execute the mission?	
Crew Selection	Consider the experience of the crews performing the mission. If individuals are replaced during the mission, assess their experience level and ensure proper turnover.	
Crew Endurance	Refer to published crew fatigue standards.	
Weather	Environment should consider all affecting factors; time of day, lighting atmospheric/oceanic conditions, chemical hazards, proximity to other external and geographic hazards/barriers, among other factors.	
Case Complexity	Event or evolution complexity considers both time and resources required to conduct the mission. Generally, the longer the exposure to a hazard, the greater the risk.	
	Total Risk Score:	

The mission risk can be visualized using the colors of a traffic light. If the total risk value falls in the GREEN ZONE (1-23), risk is rated as low. If the total risk value falls in the AMBER ZONE (24-44), risk is moderate and you should consider adopting procedures to minimize the risk. If the total value falls in the RED ZONE (45-60), you should implement measures to reduce the risk prior to starting the event or evolution.

GAR Evaluation Scale
Color Coding the Level of Risk

0	23	24	44	45	60
GREEN (Low Risk)		AMBER (Caution)		RED (High Risk)	

The ability to assign numerical values or “color codes” to hazards using the GAR Model is not the most important part of risk assessment. What is critical to this step is team discussions leading to an understanding of the risks and how they will be managed.