Operational Risk Management Analysis Using the **GAR** Model (GREEN-AMBER-RED)

Operational Risk Management (ORM) is based on a team discussion to understand the operation, evaluate the risks and how they will be managed. A GAR should be customized for each project, implemented before & during each operation, & routinely reviewed and refined to maximize effectiveness.

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

	Rating
SUPERVISION – Leadership and Supervisors are actively engaged, involved and accessible for all teams and personnel. There is a clear chain of command	
PLANNING – There is adequate information and proper planning time. JHAs are current and have been reviewed and signed by all levels. All required equipment, training and PPE had been provided.	
CONTENGENCY RESOURCES – Local emergency services can be contacted, available and respond in a reasonable amount of time. Has an emergency Evacuation Plan been prepared and is crewed briefed?	
COMMUNICATION – There is established Two-Way Radio (VHF or Emergency Dispatch) communication throughout the area of operation. EPIRB/PLB, GPS-linked, Satellite Phone, Position/Location Resources (e.g., AIS, Chart Plotters, Mobile Apps)	
TEAM SELECTION – Level of individual training, qualifications, experience, familiarity with area of operations and equipment. Cohesiveness and atmosphere that values input and self-critique.	
TEAM FITNESS – This includes physical and mental fitness. Team members are rested, engaged and overall moral is good. The team is mindful and has a high degree of situational awareness. **I**llness, **M**edications, **S**tress, **A**lcohol, **F**atigue & **F**ood, **E**motion, **R**ehydration **(IMSAFER)**	
ENVIRONMENT – Weather Forecast & Advisories, Wind, Seas, Tides, Depths, Currents, River Discharge, Debris/Ice, Surf, Rocks, Reefs, Traffic, Uncharted Water, Remoteness, Security (personnel and/or equipment)	
TASK COMPLEXITY – Severity, probability, and exposure of mishap. The potential for incident that would tax the current team level. (New Location or Operation, Route Complexity, Vessel Maneuverability, Time Constraints, Task Load, Number of People &/or Organizations Involved)	

***NOTE: Any category rated > 5 should receive specific mitigation.**

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 (1-35), risk is rated as low, avoid becoming complacent. If the total risk value falls in the AMBER ZONE (36-60), risk is moderate, and you should consider adopting procedures to minimize the risk. If the total value falls in the RED ZONE (61-80), STOP, apply measures to reduce the risk prior to starting the event or evolution.

GAR Evaluation Scale
Color Coding the Level 0f Risk

1 35	36 60	61 80
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.