

# Lost at Sea Exercise

## Background

This exercise can be used in many different settings and training programs. It is designed to work mainly within team building and leadership style training.

### Lost at Sea Scenario

You and your team have chartered a yacht. None of you have any previous sailing experience, so you have hired an experienced skipper and two-person crew. As you sail through the Southern Pacific Ocean, a fire breaks out and much of the yacht and its contents are destroyed. The yacht is slowly sinking. Your location is unclear because vital navigational and radio equipment have been damaged. The yacht skipper and crew have been lost to the fire. Your best guess is that you are approximately 1,000 miles southwest of the nearest landfall.

You and your friends have managed to save the following 14 items:

1. A shaving mirror
2. A quantity of mosquito netting
3. A 19 liter can of water
4. A case of army rations
5. Maps of the Pacific Ocean
6. A floating seat cushion
7. A 7.5 liter can of oil / petroleum mixture
8. A small transistor radio
9. 186 square decimeters of Opaque plastic sheeting
10. Shark repellent
11. 1.1 liters of 160 per cent proof rum
12. 4.5 meters of nylon rope
13. 2 boxes of chocolate bars
14. A fishing kit

In addition to the above, you have salvaged a rubber life raft. The total contents of your team's pants pockets amounts to one package of cigarettes, three boxes of matches, and three pieces of paper currency.

**YOUR CHANCES OF SURVIVAL WILL DEPEND UPON YOUR ABILITY TO RANK THE ABOVE 14 ITEMS IN THEIR RELATIVE ORDER OF IMPORTANCE. GOOD LUCK!**

# Lost at Sea Exercise

## Instructions

### Part 1

Participants should divide into teams of 5 and then be given 10 minutes to *individually* rank the 14 items.

### Part 2

Team members should then confer for an additional 10 minutes and decide on the team's priority ranking of the 14 items.

### Part 3

Team members should then compare their individual rankings with those determined by the group as a whole, and discuss why the scores differ, if applicable. Or, if individuals would re-rank items based on the group discussion, what changed their minds? How were they influenced by the group?

## Lost at Sea Suggested Answers / Rationale

According to the experts (United States Coastguard), the basic supplies needed when a person is stranded mid-ocean are articles to attract attention and articles to aid survival until rescue arrives. Without signaling devices, there is almost no chance of being spotted and ultimately rescued. Furthermore, most rescues occur within the first 36 hours and a person can survive with only a minimum of food and water during that period. So, the following is the order of ranking the items in their importance to your survival:

1. The shaving mirror would be critical for signaling.
2. The oil / petroleum mixture would also be critical for signaling. The mixture will float on water and could be ignited with one of the pieces of paper currency and a match.
3. The water would be necessary to replenish fluids lost through perspiration.
4. One case of army rations would provide basic food intake.
5. The opaque plastic could be used to collect rain water and provide shelter from the elements.
6. The chocolate bars could provide reserve food supply
7. The fishing kit is ranked lower than the chocolate since 'a bird in the hand is worth two in the bush', and there is no guarantee that you will catch any fish.
8. The nylon rope could be used to secure people or equipment to prevent them from being washed overboard.
9. The floating seat cushion could serve as a life preserver if someone fell overboard.
10. Shark repellent
11. The 160 per cent proof rum contains 80% alcohol, which is enough to be used as an antiseptic for any injuries; otherwise, it is of little value.
12. The small transistor radio would be of no use without a transmitter. You would also be out of range of any radio station.
13. Maps of the Pacific Ocean would be worthless without navigation equipment.
14. The mosquito netting would not be necessary, as there are **NO** mosquitoes in the mid-Pacific Ocean, and the fishing kit would be more effective for catching fish.

## Team Dynamics Exercise-LOST AT SEA

You are adrift on a private yacht in the South Pacific. As a consequence of a fire of unknown origin, much of the yacht and its contents have been destroyed. The yacht is now slowly sinking. Your location is unclear because of the destruction of critical navigational equipment and because you and the crew were distracted trying to bring the fire under control. Your best estimate is that you are approximately one thousand miles south-south-west of the nearest land.

Below is a list of fifteen items that are intact and undamaged by the fire. In addition to these items you have:

- A serviceable, rubber life raft with oars which is large enough to carry yourself, the crew and all the items listed below.
- The total contents of all survivors' pockets are a package of cigarettes, several books of matches and five one-dollar bills.

Your task is to rank the 15 items in terms of their importance for survival. Using the scoring sheet provided place number one (1) by the most important, and so on through number 15, the least important.

- Sextant
- Shaving mirror
- Five-gallon can of water
- Mosquito netting
- One case of U.S. Army C rations
- Maps of the Pacific ocean
- Seat cushion (flotation device approved by the Coast Guard)
- Two gallon can of oil-gas mixture
- Small am/fm radio
- Shark repellent
- Twenty square feet of opaque plastic
- One quart of 160-proof rum
- Fifteen feet of nylon rope
- Two boxes of chocolate bars
- Fishing kit

You and the other members of your "design team" will take this test individually, without knowing each other's answers, then you will re-take the test as a group. When working as a group you will share your individual solutions and reach a consensus - one ranking for each of the 15 items that best satisfies all group members.

## LOST AT SEA – Scoring Sheet

<b>Name</b>	<b>Expert's RANKING</b>	<b>YOUR RANKING</b>	<b>ERROR POINTS</b>	<b>GROUP RANKING</b>	<b>ERROR POINTS</b>
sextant					
shaving mirror					
five-gallon can of water					
mosquito netting					
one case of C rations					
maps of Pacific ocean					
seat cushion					
two-gallon can of oil-gas mixture					
small transistor radio					
shark repellent					
twenty square feet of opaque plastic					
one quart of 160 proof rum					
fifteen feet of nylon rope					
two boxes of chocolate bars					
fishing kit					
		<b>TOTAL ERROR POINTS --&gt;</b>		<b>TOTAL ERROR POINTS --&gt;</b>	

Experts' ranking will be provided at the completion of the exercise. Error points are the absolute difference between your ranking and the survival experts' ranking (disregard plus or minus signs).

## LOST AT SEA-Answers and Rationale

NAME	Expert's REASONING	Expert's RANK
Sextant	Without tables and a chronometer, relatively useless	15
Shaving mirror	Critical for signaling in air-sea rescue	1
Five-gallon can of water	Necessary to replenish loss by perspiration, etc.	3
Mosquito netting	No mosquitos in the mid Pacific	14
One case of C rations	Provides basic food needs	4
Maps of Pacific ocean	Worthless without additional navigation equipment	13
Seat cushion	If someone falls overboard, could help save them	9
Two gallon can of oil-gas mixture	Critical for signaling-could float on water and be ignited with dollar bill and match	2
Small transistor radio	Of little value since there is no transmitter-not going to get many AM stations out here anyway!	12
Shark repellent	Obvious use-stay out of water	10
Twenty square feet of opaque plastic	Used to collect water and provide shelter	5
One quart of 160 proof rum	With 80% alcohol content could provide antiseptic surface treatment for injuries	11
Fifteen feet of nylon rope	Lash equipment and help avoid falling overboard	8
Two boxes of chocolate bars	Reserve food supply	6
Fishing kit	Ranked lower than candy since "a bird in had is worth two in bush" – no guarantee there are fish in area	7

The basic rationale for ranking the signaling devices above the life-sustaining items (food and water) is that without signaling devices there is almost no chance of being spotted and rescued. Furthermore, most rescues occur during the first thirty-six hours and one can survive without food and water during that period.

### Scoring for individuals

0-25-excellent

26-32-good

33-45-average

71-112- very poor (suggests possible faking of results)

46-55- fair

56-70 -poor

## Notes on decision by consensus

After everyone has finished the individual ranking, work together with the rest of the team to produce a TEAM CONSENSUS RANKING. The time allowed is 30 minutes.

### **DECISION BY CONSENSUS**

This is an exercise in team decision-making. Your group is to employ the method of TEAM CONSENSUS in reaching its decision.

This means that the prediction for each of the 15 survival items **MUST** be agreed upon to some extent by each group member before it becomes part of the group decision.

Consensus is difficult to reach. Therefore, not every ranking will meet with everyone's complete approval. Try, as a team, to make each ranking one in which all team members can at least partially agree.

### **Here are some guides to use in reaching consensus:**

1. Avoid arguing for your own individual judgments. Approach the task on the basis of logic.
2. Use your own and others' logic.
3. Avoid changing your mind only in order to reach agreement or avoid conflict. Support only solutions with which you are able to somewhat agree.
4. Avoid conflict-reducing techniques such as majority vote, averaging or trading votes in reaching decisions.
5. Stick to your point of view even if the going is rough and the group disapproves.
6. Let conflict come out.
7. View differences of opinion as helpful rather than as a hindrance in decision-making.
8. Use a win-win approach.
9. View your initial agreement as suspect.

### **Debrief Questions (choose a few to discuss):**

- How were decisions made?
- Who influenced the decisions and how?
- What behaviors helped/hindered the consensus-seeking process?
- What patterns of decision-making occurred?
- How could better decisions have been made?
- Did people listen to each other, if not – why?
- What roles did group members adopt?
- Who were the influential group members and how were they influential?
- How was conflict managed?
- How did people feel about the final decisions? Rank satisfaction level among group and discuss.
- What have you learned about the functioning of this group?
- How would you do the activity differently if you were asked to do it again?
- What situations at work do you think are like this exercise?

**Using in a workshop:** This exercise can be used at the beginning, middle, or end of a workshop. It can be the practical application related to team function, collaboration, cooperation, conflict resolution, consensus, group function, etc. This is a great exercise to help facilitate positive group function and professional collaboration.