

# DISASTER AT THE JOADIA ISLANDS



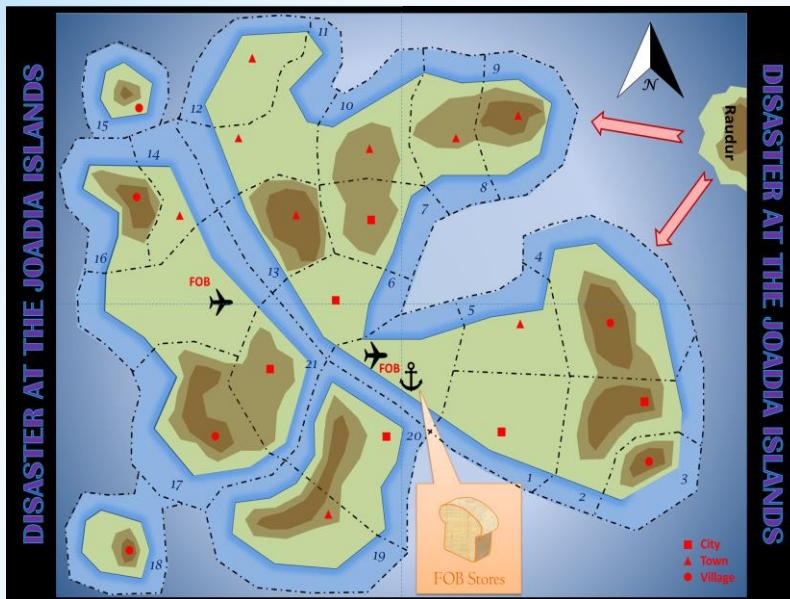
A massive tsunami has hit the tiny pacific nation of the Joadia Islands (450nm NE of Vanuatu). Much of the infrastructure is out, food stores have been ruined, mudslides have destroyed many of the roads and there are numerous isolated towns and villages with scared, sick and injured people in need of rescue.

Your team will head up an ADF Joint Task Force who will attempt to supply food, water and medical treatment and evacuate as many refugees as possible from the islands.

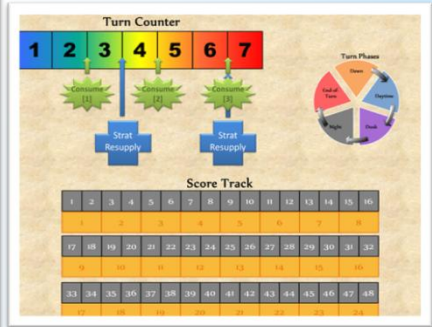
Time is imperative, as starvation, infection and disease will ravage the outlying population centres.

Meanwhile, the neighbouring (rogue) nation of Raudur is seeking to hamper Australian efforts in order to disrupt stability and further their (false) claim of sovereignty over Joadia. Militia cells have been using a shallow shipping lane to land on Joadia; destabilising the population and turning them against their local government and the aid coming from Australia.

# Game Components



Game Board



Turn Counter and Score Track



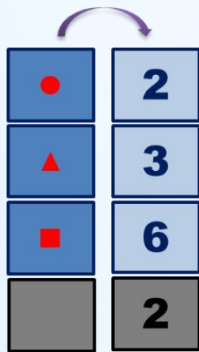
Death Tracker



Evacuee Tracker



Turn Tracker



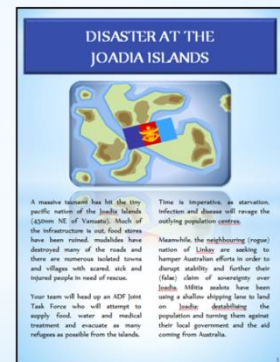
Population Tokens  
(x64)



Raudur Fishing Boat  
Tokens (x8 (4 each))



Hunger/Unrest  
Tokens (x8)



Rule Book and  
Summary Sheets



OPV (x2)



Medic (x2)



Supply Tokens (x30)



Mot Coy (x2)



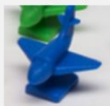
Inf Coy (x2)



MRH-90



P8



CI30



Raudur Militia Cell (x4)

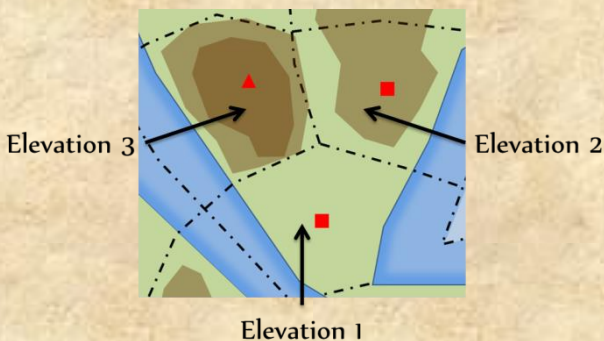


# Game Setup

## Map

The map of the Joadia Islands is divided into territories. Any number of units and people can be in a given territory cell at any time.

The terrain cells have elevations of 1, 2 or 3 which will impact on ground movement. Use the highest elevation shown within a territory.



All territories also include a coastal region which is pilotable by patrol vessels and fishing boats.

## Forward Operating Bases

There are two FOB locations: one has an SPOD and both have APODs. The SPOD begins the game with 20 Supply tokens. (See 'Consume Phase', p8.) All JTF units begin in the FOB locations.

The FOBs have been stabilised and any civilians who are moved to them will be provided with food, water, medical and security automatically.

## Civilian Populations

Each territory outside of the two FOBs will have a population of Healthy Refugees and possibly an additional set of Injured Refugees. At the beginning of the game, these will be pseudo-randomly distributed, based on whether the territory contains a city, town or village.

|           |             |
|-----------|-------------|
| ■ City    | 4-6 Healthy |
| ▲ Town    | 2-4 Healthy |
| ● Village | 1-2 Healthy |

Place a face-down Injured Refugee population token on each territory and a face-down Healthy Refugee population token in each territory, corresponding to cities, towns and villages (as per the map).





# Players And Roles

## Joint Task Force

The Blue side consists of a number of players taking on the roles of the three services. All are working together to assist the inhabitants of Joadia as best they can.

Players are welcome to communicate and coordinate their forces in any manner they choose.

Each turn, every unit will be activated once, but the order in which they are used is entirely up to the players; it can even change from turn to turn.

## Navy

The Navy uses Offshore Patrol Vessels to quickly transport people and troops around the islands. They also provide Medical support to aid the sick and injured.



OPV (x2)



Medic (x2)

## Army

The Army brings two Motorised Companies for transporting civilians and troops around the theatre; two

Infantry Companies for stabilisation and an MRH-90 helicopter Troop in a Search-And-Rescue role.



Mot Coy (x2)



Inf Coy (x2)



MRH-90

## Air Force

The Air Force provides vital ISR from a P8 and intra- and inter-theatre lift, as well as air drops, from a C130.



P8



C130

## The Raudur Insurgents

The enemy player will have access to a number of 'fishing boats' which may, or may not, be transporting small militia cells.

If these cells can land on Joadia before being interdicted, they will hamper the JTF efforts by instigating unrest and committing humanitarian crimes against the scared and isolated populations.

# Basic Actions

## ISR

At the start of play, there will be no information available to the JTF on how many surviving Refugees are at each of the territory locations. As the game progresses, players will need to employ Intelligence, Surveillance and Reconnaissance (ISR) to determine how many will need to be evacuated.

*Any unit which ends its turn in a territory will automatically conduct ISR there.* The P8 also has a dedicated ISR function.

To perform ISR:

- Turn both Healthy and Injured Population tokens face-up to reveal the respective sizes.
- Immediately apply any Consume effects from previous turns, if applicable. (See Consume Phase on p8.)

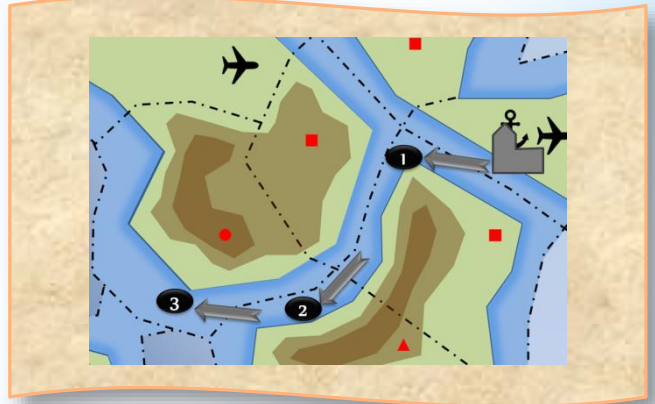
## Movement

Movement of units in the game can be over Sea, Land or by Air.

When moving from territory to territory, units must always cross over boundaries at edges and not skip across at corners.

### Sea Movement

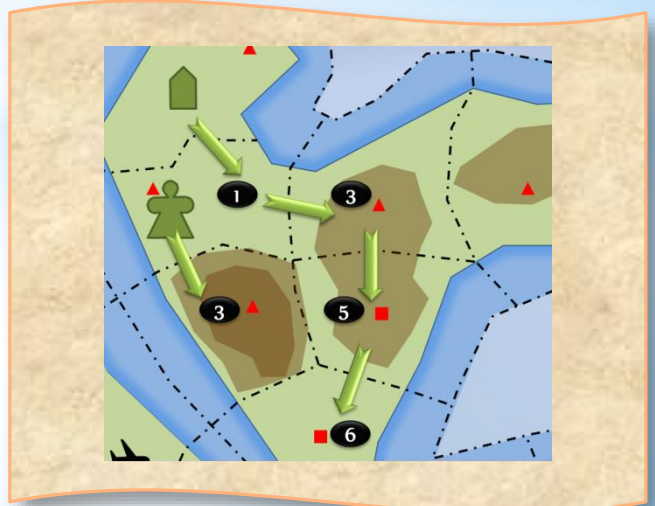
OPVs and enemy Fishing Boats can move up to 3 territories using the coastal water routes.



### Land Movement

Mot Coys and Inf Coys can move any number of territories in a turn, up to their limit in 'movement points': 6 for Mot Coys and 3 for Inf Coys.

The elevation of the territory that the unit is *moving into* is taken as the cost in points.



# Basic Actions

## Movement (cont'd)

### Air Movement

The MRH-90 can move over sea or land, up to 3 territories each turn, ignoring all elevation penalties.

The C-130 and P8 follow separate rules for their mobility (see p14).

## Lift

The Mot Coys, OPVs and MRH-90 are designed to embus other units and move them quickly around the theatre.

Units which can be embused are:

- Healthy Refugees
- Inf Coys
- Medics

Mot Coys and OPVs can also lift Supplies as well.

The amount of people and stores able to be lifted by each unit will be described in their detailed rules later.

**Note:** The MRH-90 Search-and-Rescue helicopter is able to lift Injured Refugees. *It is the only asset that can do so.*

The JTF players will need to balance the requirements to conduct ISR, manoeuvre ground units quickly, transport Refugees to the APODs, distribute Supplies to keep the populations alive and healthy and neutralise the negative influences from Raudur.

The primary goal is to evacuate Refugees from the APODs out of theatre.



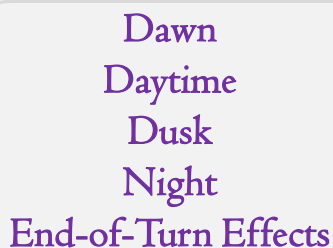
# Turn Structure

## Turn Order

The entire game will be played over 7 Turns. [However, for the purposes of demonstration, it is recommended that just 5 turns are completed; this is sufficient to get a feel for the wargame and to gain insights into different strategies' effectiveness.]

The duration of a single Turn represents approximately one day of the operation.

Within each turn the following four or five phases will occur:



- Dawn
- Daytime
- Dusk
- Night
- End-of-Turn Effects

## Dawn Phase

The Dawn Phase represents the soldiers in the field breaking down camps, loading trucks and boats for the day's movements and the like.

During the Dawn Phase, all Units, Refugees or Supplies that are to be lifted (see Basic Actions, p5) will be assigned to the appropriate Unit (i.e. Mot Coy, OPV, MRH-90 or CI30).

## Daytime Phase

During the Daytime Phase, air sorties are run and the planned movements all of Units are executed, according to their specific rules. This can be done in any order that the players see fit, but each Unit can only be used once per turn.

## Dusk Phase

At dusk, the Units have arrived in location and begin to engage with Refugee populations, distribute Supplies, set up camps, security areas, medical facilities and the like. The effects of the Units are applied, and this ends the actions of the JTF side.

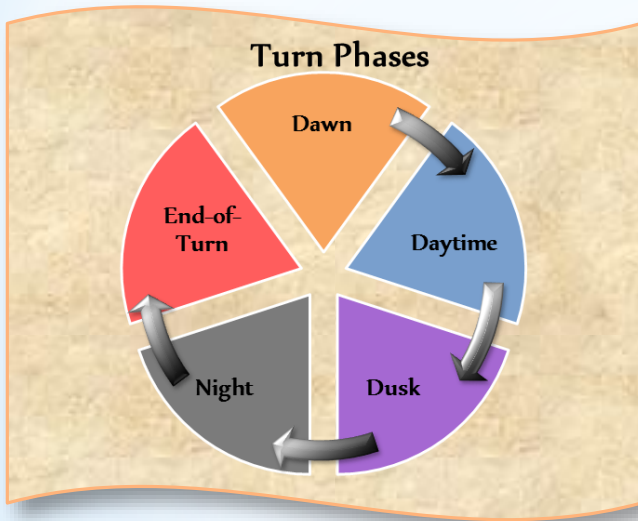
## Night Phase

The Raudur player move under the cover of dark. During the Night Phase, they can deploy up to two new Fishing Boats, move all existing boats and action any Militia cells.

# Turn Structure

## End-of-Turn Effects

At the conclusion of every second turn, the Refugees will *consume* Supplies and at the end of every third turn the SPOD will receive a *strategic resupply*.



## Strategic Resupply & FOBs

After every third turn, an additional 15 supply tokens will be loaded into the SPOD FOB.

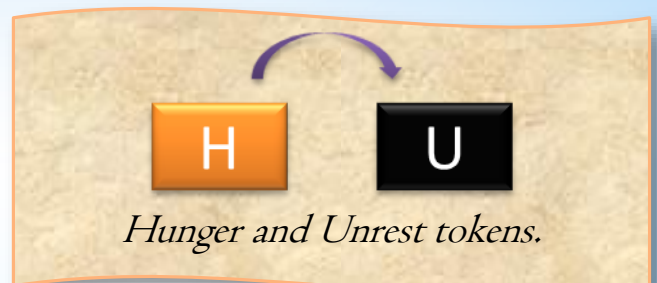
**Note:** *All Refugees that are moved into either FOB are automatically provided all medical treatment and nourishment indefinitely.*

## Consume Phase

At the end of every second turn, the state of the refugee populations will change, depending on whether they have supplies to sustain them, and other effects.

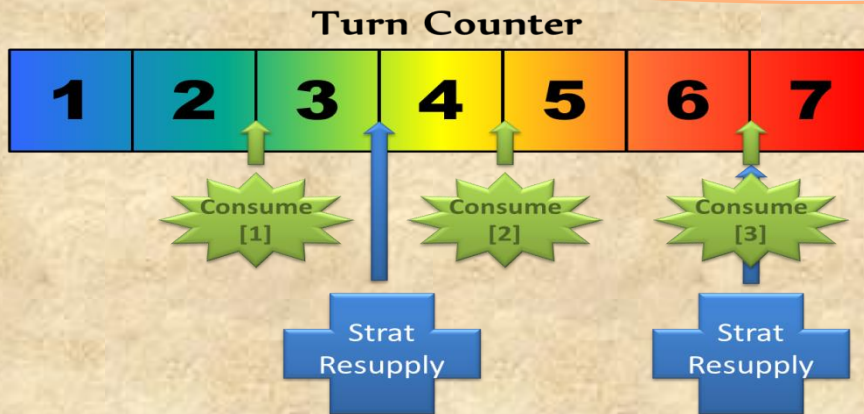
Apply the following effects to each territory:

- Refugees consume the Supplies: remove 1 token for every 3 Refugees (Healthy and Injured).
- If there is not enough food for all the Refugees to eat, remove one Healthy Refugee and:
  - If there is no Hunger token present, place one in the territory
  - If there is a Hunger token present, flip it to Unrest.
- Remove 1 Injured Refugee: they have died from their wounds/disease.





# Turn Structure



**Note:** As ISR is applied to territories later in the game, these effects from all previous turns must be applied to the populations there retroactively.

E.g. if a territory is uncovered in Turn 5, with no Supplies having been delivered, then 2 Healthy and 2 Injured Refugees are removed instantly.

## Civil Unrest

### Unrest

If a territory has an Unrest token on it, the Refugees become belligerent and violent and *cannot be lifted* by Mot Coy or OPV or MRH-90.

An Inf Coy *in situ* will subdue the protesters and will remove the Unrest token.

**Note:** Even though the effects of supplying the populations are applied retroactively if ISR is conducted on a location later in the game, the Hunger/Unrest tokens *are not*.

This is to represent the growing frustrations of Refugees who have seen the HADR efforts of the JTF but have been left isolated and untended.

Populations who have not been discovered for many days are just happy to see help arrive. (Despite having taken casualties from starvation and disease!)

# Scoring

The primary objective of the JTF is to evacuate as many Refugees as possible. An implicit task is to keep as many alive as possible.

As the game progresses, the Score Track will be updated to show the level of success (or failure) of the team.

Every time a Refugee dies (from whatever means), move the black 'death' meeple along the track one space.

Every time a Refugee is evacuated out of theatre, move the orange 'evacuated' meeple along one. Each saved person is worth two deaths.

## Score Track

|    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |  |
|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|--|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |  | 14 | 15 | 16   |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  |    |    |    |    |    |   |    |    |  |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29  | 30 | 31 | 32   |
| 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |    |    |    |    |   |    |    |  |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45  | 46 | 47 | 48   |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |    |    |    |    |   |    |    |  |

At the end of the game the players will need to maximise the number of evacuated Refugees and minimise the number of deaths.

# Unit Descriptions - Navy

## OPVs

The Offshore Patrol Vessels are used for transporting pax and supplies through coastal regions and for interdicting potential enemy boats.

Each turn, an OPV can move up to three coastal territories and can carry either up to 3 supplies or 3 pax (Inf, Medics and/or Refugees). An OPV is fitted out for either stores or pax and therefore cannot carry combinations thereof. Loading is done at the start of their turn, in the Dawn Phase.

During the Dusk Phase, the OPV can unload any cargo inland.

If an OPV is not carrying Refugees and ends its turn in the same territory as a Fishing Boat, it can *interdict* the boats (forfeiting the ability to unload cargo): the boats are removed from the game. [If they contain enemy Militia cells they are secured; if not they are tagged as benign.]

The Navy player decides at which FOB(s) the OPVs will begin the game.

## Medics

Medic units represent teams of doctors and nurses with sufficient infrastructure and equipment to treat a range of injuries to small populations in the field.

The role of the medics is to treat Injured Refugees and stabilise them for movement around and out of theatre. Medics can be lifted by Mot Coys or OPVs or move independently over land into any one adjacent territory on foot (regardless of elevation).

During the Dusk Phase, up to two Injured Refugees in the same territory can be turned into Healthy Refugees.

The Navy player decides at which FOB(s) the Medics will begin the game.

**Note:** The SPOD is on the southern coast of the main FOB territory, and cannot be accessed from the north by OPVs wanting to load supplies.

They can, however, unload refugees on the north shore and they can be picked up by FOB security patrols.



# Unit Descriptions - Army

## Mot Coys

Motorised Companies are groups of vehicles used to lift troops, Supplies and Refugees. Each one can carry either 2 supply tokens or up to 2 Inf, Medics and/or Healthy Refugees.

They have a movement of 6L and can traverse any number of territories up to a total of 6 movement points (where the elevation of the terrain depicts the penalty). During the Dusk Phase, they can unload cargo and will automatically gain ISR on the territory they are in.

Whilst moving, a Mot Coy can take a penalty of 1 movement point to gain ISR on a territory they are passing through.

The Army player decides at which FOB(s) the Mot Coys will begin the game.

## Inf Coys

Infantry Companies are used to provide security for local populations and to engage enemy Militia Cells. No enemy can enter into a terrain location where an Inf Coy is and, if an Inf Coy can end their turn in the same location as an enemy unit they can destroy it (remove it from the game).

If there is an Unrest token in a terrain cell and an Inf Coy ends their turn there, they may remove it.

On foot, Inf Coys can move up to 3 territories, subject to movement penalties.

If lifted by a Mot Coy, MRH-90, OPV or C-130, the Inf Coy will debus in the Dusk Phase and cannot move on foot thereafter that turn.

The Army player decides at which FOB(s) the Inf Coys will begin the game.

# Unit Descriptions - Army

## MRH-90

The MRH-90 unit represents a troop of helicopters fitted out for Search-and-Rescue tasks; they are able to fly quickly into remote locations and recover Injured Refugees.

They can move up the three cells in a turn (ignoring terrain effects) and pick up three Injured Refugees OR three Healthy Refugees and/or Medics and/or Inf Coys.

Whilst in flight, the MRH-90 may drop off an embused Inf Coy into any territory flown over for free.

The helicopters have limited fuel endurance and must either start *or* end their turn in a FOB.

The Army player decides at which FOB the MRH-90 will begin the game.

**A Note On Scale:** The sizes of the units, refugee populations and distances are abstract and represent an indicative rate of effort. For example, an MRH-90 token does not equate to a single platform: it might be 6 or 8 helicopters in a Troop. A population size of '2' is not meant to indicate two individuals, but perhaps 200. The numbers used in the game are kept small to make gameplay quicker and easier. They have been calibrated based on the effects that can be delivered.

# Unit Descriptions – Air Force

## C130

The C130 can be used to evacuate Refugees, air-drop Supplies or lift any other land units from one APOD to another. (But only one of these actions per turn.)

*Evacuate:* take up to 8 Refugee tokens at either or both APODs and remove them from the map. They have been successfully evacuated from theatre. Update the Score Tracker accordingly.

*Air-drop:* move up to 5 supply tokens from any FOB(s) and para-drop them onto any number of territories (even if the population of that territory has not yet been determined).

*Intra-Theatre Lift:* move any number of land units (Mot, Inf, or Medics) from one APOD to another. Those units cannot take any further actions this turn.

**Note:** The playing piece for the C130 is never actually 'in' a territory. It is assumed to have access to either or both APODs in a single turn, and will begin and end at an APOD.

## P8

The P8 is used to perform detailed surveillance from altitude. It can be used to conduct ISR on territories or Fishing Boats. Either:

Select *any* territory on the map and place the P8 playing piece there. It will instantly reveal the population size and condition.

or

Select any Fishing Boat and flip it over to reveal whether it is a decoy or contains a Militia cell. Turn it back face-down afterwards.



# The Raudur Enemy Units

## Fishing Boats

The Raudur player has access to eight 'Fishing Boats'; four are decoys and four contain Militia Cells on board.

Each turn, the Raudur player can bring on up to two fishing vessels, into either or both of the territories indicated on the map by the red arrows. They may choose whether they are decoys and/or contain Militia Cells.

The fishing boats can move up to 3 coastal territories each turn, and may deploy a Militia cell into any territory that they end their turn in.

If a Militia Cell is deployed, that will end its turn and that of the Fishing Boat.

If an OPV ends their turn in the same territory as a Fishing Boat and decides to interdict the Fishing Boat it is removed from the game: it has either been tagged by the JTF as benign or captured by the OPV if holding Militia.

## Militia Cells

Dismounted Militia Cells have 3 movement points per turn – subject to the elevation penalty. (They cannot move or take actions in the same turn as being deployed from a boat.)

In the territory that they end their turn on, Militia Cells can:

- Sabotage Supplies (remove all food) OR
- Commit humanitarian crimes (convert 2 Healthy civilians into 2 Injured) OR
- Apply an Unrest token.

If an Inf Coy ends their turn in the same territory as a militia cell, the enemy unit will be destroyed.

Militia cells are free to move into or through the FOBs, but due to the base security they do not have the capability to harm them in any way.

**Note:** The enemy player may look discreetly at face-down population tokens in any territory that they have Fishing Boats or Militia Cells in at the end of their turn.

# Notes From The Designer

This game represents the lower-end of tabletop gaming in the professional domain: there has been the minimum of resources put into it and it is a very crude model of a HADR scenario. It is simply a concept demonstrator designed to be learned and played in a couple of hours. Thus, it does not fully embody what can be produced at even modest scales of effort.

However, it should be enough to give the participant a clear understanding of the purpose and usefulness of wargaming. You can see how the decisions made throughout the wargame are at least as important as the capabilities being modelled (generally much more so).

After a play-through, have your team discuss the following questions:

- What would you do differently next time in order to improve your score?
- How would you alter the design of your force? E.g. what if you had access to two P8s? Would you be prepared to forfeit the MRH-90 for them?
- How would new technologies alter your Scheme of Manoeuvre? Consider the impact of air-deployable automated medical stations, or flying drones that can deliver Supplies quickly over rough terrain.

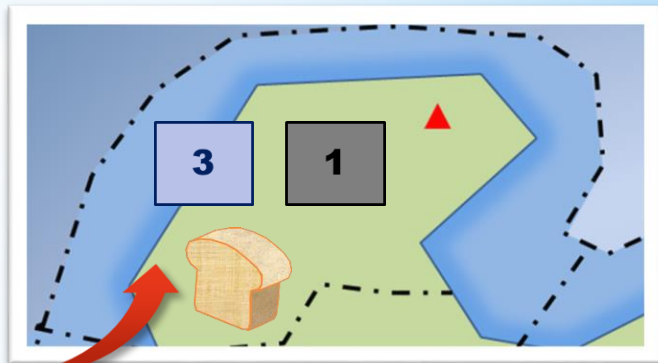
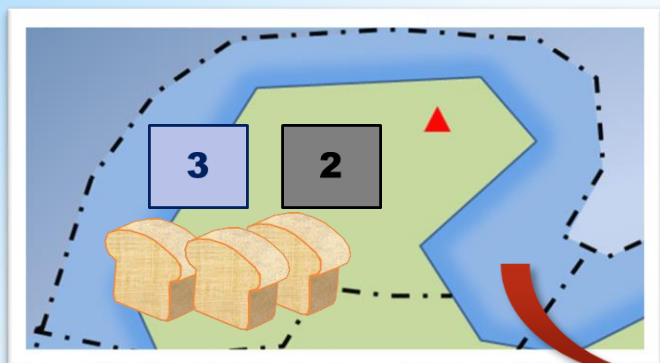
I hope you enjoyed playing 'Disaster at the Joadia Islands' and that it has given you a greater understanding and appreciation for the craft of wargaming.

*Peter*

**Game Design:** Peter Williams, Land Capability Analysis (DST)

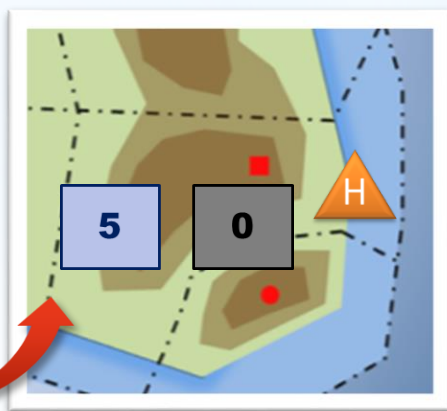
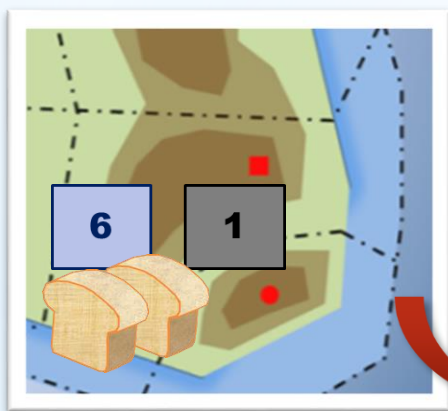
**Questions/comments:** [peter.williams2@dst.defence.gov.au](mailto:peter.williams2@dst.defence.gov.au)

# Consume Phase Examples



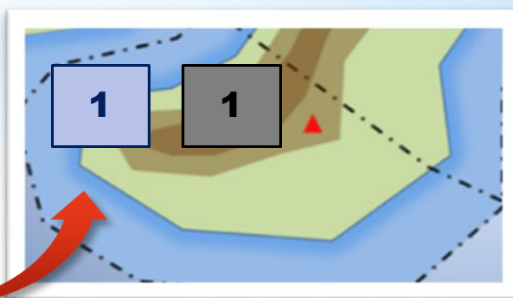
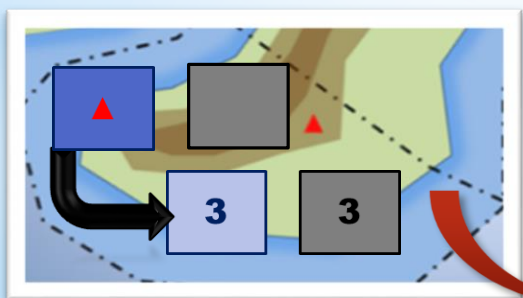
A Town with 3 Healthy and 2 Injured Refugees has 3 Supplies.

This is sufficient to feed up to 9, so the Healthy Refugees all survive, but one Injured Refugee still dies from disease or wounds regardless. Only two of the Supplies are consumed.



A City with 6 Healthy and 1 Injured Refugees has 2 Supplies.

This is *insufficient* to feed 7, so the one Healthy Refugee dies from starvation and one Injured dies from disease or wounds as well. All Supplies are consumed and a 'Hunger' token is applied to the territory.



On Turn 5, ISR is conducted on a Town. It is revealed to have started with 3 Healthy and 3 Injured Refugees. Applying the two Consume Phases (with no Supplies available), 2 Healthy and 2 Injured Refugees die upon revealing.



# Turn Summary Sheet

|              | Dawn Phase  |  | Daytime Phase  |  | Dusk Phase  |  | Night Phase  |  | Special   |
|--------------|---|--|--|--|---|--|--|--|---|
| OPV          | Load: 3 Supplies<br>OR 3 Pax  |  | Move up to 3 coastal territories<br>and perform ISR at destination           |  | Can interdict a Fishing Boat if not<br>carrying Refugees<br>Unload cargo into territory |  |  |  |   |
| Medic        |   |  | Move to any adjacent territory<br>and perform ISR at destination             |  | Turn 2 Injured Refugees to<br>Healthy Refugees  |  |  |  |   |
| Mat Coy      | Load: 2 Supplies<br>OR 2 Pax  |  | Move 6 over Land<br>(subject to elevation)<br>and perform ISR at destination |  |   |  |  |  | Can conduct ISR on the move at<br>cost of 1 movement point      |
| Inf Coy      |   |  | Move 3 over Land<br>(subject to elevation)<br>and perform ISR at destination |  | Engage and destroy Militia Cells<br>and remove Unrest tokens                            |  |  |  |   |
| MRH-90       | Load: 3 Injured Refugees/<br>Healthy Refugees<br>Inf Coy/Medics                   |  | Move 3 (unconstrained)<br>and perform ISR at destination                     |  |   |  |  |  | Must start or end in a FOB                                      |
| C100         | Load: 8 Refugees<br>OR 5 Supplies<br>OR any number of Mat Coy, Inf<br>Coy, Medics |  | Evacuate Refugees<br>OR Air-drop Supplies<br>OR Intra-theatre lift           |  |   |  |  |  |   |
| P8           |   |  | Reveal any territory status<br>OR Identify any Fishing Boat                  |  |   |  |  |  |   |
| Fishing Boat |   |  |  |  |   |  | Deploy 2 new Fishing Boats<br>Move all Fishing Boats up to 3<br>coastal territories<br>Can lodge Militia Cell onto land<br>Move 3 over Land<br>(subject to elevation)<br>Can sabotage supplies OR<br>commit humanitarian crimes OR<br>cause Unrest |  |   |
| Militia Cell |   |  |  |  |   |  |  |  | Cannot take any actions on the<br>turn they debuss Fishing Boat |