# Rescue POW Mission Tutorial

To complete this tutorial you will modify the Stratis Island map and modify a mission script.

## Preparing to Create the Mission

Copy the MissionPOW.Stratis folder to:

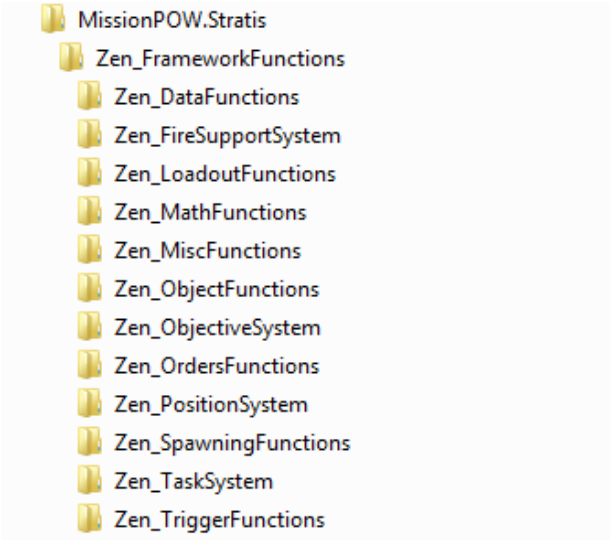
<MyDocuments>\Arma 3 Alpha - Other Profiles\<MyProfile>\missions\

Copy the Zen_FrameworkFunctions directory from the Shell.Stratis directory to:

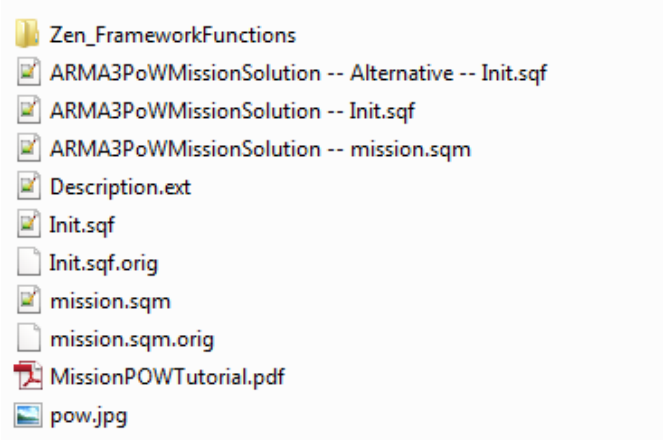
<MyDocuments>\Arma 3 - Other Profiles\<MyProfile>\missions\ MissionPOW.Stratis\

This directory (and its sub-directories) contains all the code for the Co-op Framework.

This is what your \missions directory should look like:




These are the contents of the \MissionPOW.Stratis directory:



## Updating the Map

Open ARMA and then the Editor. Select Stratis Island and Continue.

Choose the load function  and select MissionPOW.

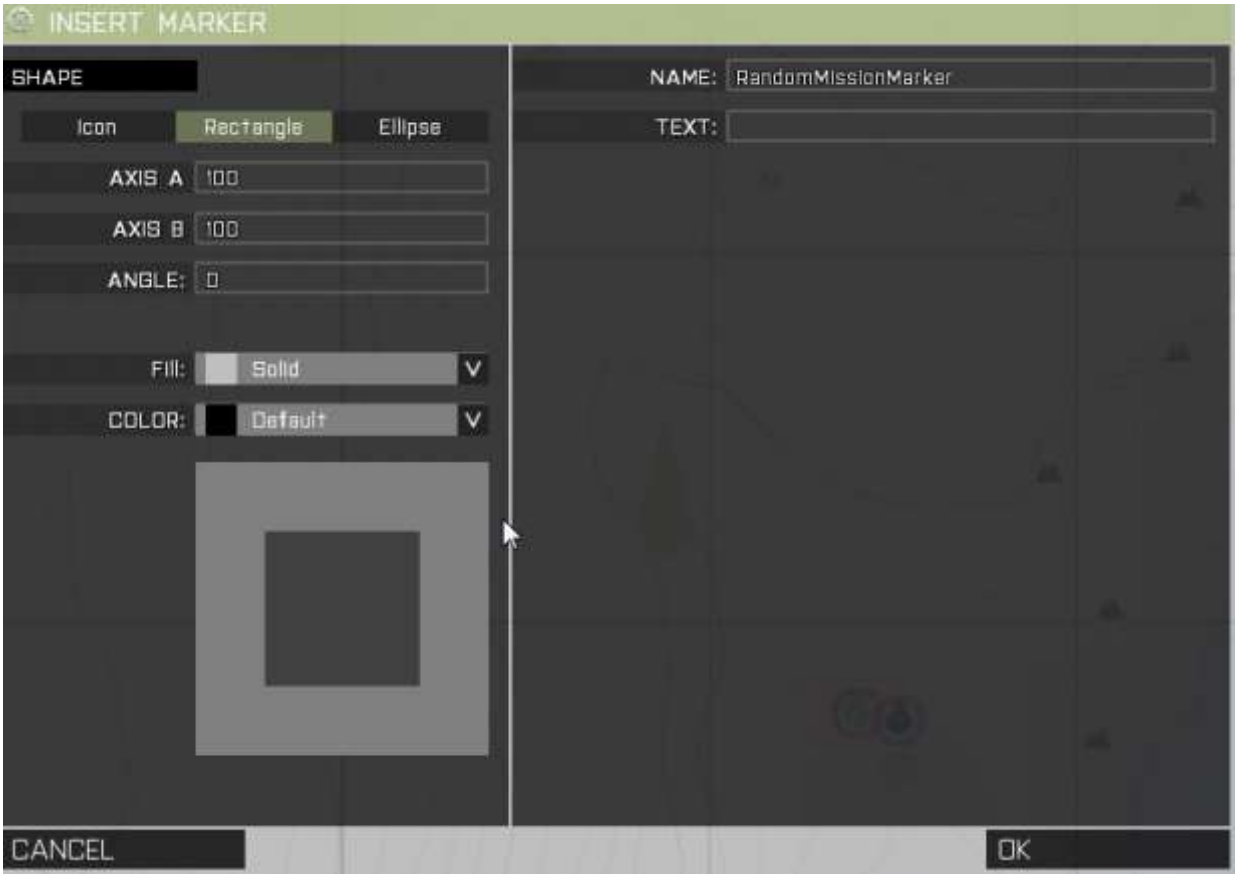
To the South of Agia Marina is a BLUFOR rifle unit. This is the squad you will command when you play this mission. The name of the Team Leader is “X11”. You will use this name when you create your mission script. (The other units are named and playable in co-op mode).

Arma 3 Note: If you are not familiar with the editor then switch to Traditional Layout by choosing this icon:

Use F6 to enter the editor's Marker Mode. This is the only mode in which you can see the markers.

Double click at the military range directly to East of the BLUFOR squad.

Enter these values to create an area marker and choose OK.




Axis A =100 (Horizontal), Axis B = 100 (Vertical)
Name = RandomMissionMarker


The editor map will look something like this.

Choose  or CTRL-S to save the mission.

You’re finished with the updates that you will make to the map. But leave the editor open.

## Updating the Initialization Script

Open the *init.sqf* file with your favorite text editor.

Notepad++ or some other 'neutral' editor is recommended. The entire framework was coded using Notepad++.

The brains of a framework mission are the init.sqf file, where you will enter the commands below to complete this mission.

At the top of the init file is an include command that executes commands required by the framework. Beneath that are commands you will learn about in other tutorials.

At the point labeled 'Enter the mission code here' enter this statement:

```
_ObjectivePos = ["RandomMissionMarker"] call
Zen_FindGroundPosition;
```

Note that this statement ends with a semicolon.

The heart of the framework is a function called FindGroundPosition. This function returns a random x,y,z coordinate relative to the parameters you pass into it.

In the first statement above, _ObjectivePos is the variable name for the x,y,z position that the function returns.

And so what did the function return? A random point inside the *RandomMissionMarker* area.

What's in the mission directory?

The mission.sqm file contains details of the 'static' elements on the map: the squad you will command and the mission marker. It should have a date time stamp of when you saved the mission a few minutes ago.

The other subdirectories contain the framework code, written in the sqf language.

The init.sqf is the file you are editing in this section of the tutorial.

X,Y and Z are simply points in the three dimensional game world. The origin is the lower left of the map so all X and Y values are greater than zero.

The ARMA game world treats the terrain as flat so Z is almost always zero in calculations involving positions.

With this random point determined, the framework will now be instructed to create a task and place the task objective at this random point.

Enter this statement next:

```
_yourObjective = [_ObjectivePos, (group X11), west, "POW", "rescue"]
call Zen_CreateObjective;
```

The value of 'POW' in fourth position of the argument index means to create a 'Save the PoW' type mission.

Calling the CreateObjective function will place a single BLUFOR (WEST) PoW at _ObjectivePos.

But honestly, rescuing an unguarded PoW isn't much of a mission.

Enter this line to place a single OPFOR squad near the PoW.

```
_enemyGroup = [_ObjectivePos, east, 0.2, [2, 4]] call
Zen_SpawnInfantry;
```

Save the init.sqf file and return to the ARMA editor.

## Play the Mission.

Launch the mission from inside the editor by selecting ‘Preview’.

## Post-Mortem

If you played the mission here’s what you should have seen:

- A task for the “Rescue PoW” objective.
- The marker area shows on the map as a grey square.
- A dot that shows approximately the location of the PoW.
- A single prisoner of war guarded by 2 to 4 hostile guards.
- After rescuing the PoW, the task should have shown completed and the PoW should have joined your squad. (Just walk up to PoW to rescue him.)

## Technical Corner

Most tutorials will have a Technical Corner where one or two functions are described in greater detail or more examples are supplied. In the primary Framework documentation folder, which is itself organized by categories in sub-folders, are descriptions of all the functions that a mission designer can use to create random missions.

Sometimes the code snippets seen in the Technical Corner are included in an 'alternative solution' version. You'll see these alternative init.sqf files in the tutorial mission subdirectory. If you want to run them or experiment with different code just rename them to 'init.sqf'.

The Spawn Infantry function on its own can be the cornerstone for simple ad hoc missions.

It has four required parameters:

1: An x,y,z position to spawn the squad at
    (example = a variable like *_ObjectivePos*)
2: The side of units to be spawned, EAST or WEST
    (example =WEST)
3: The skill of the units, from 0 to 1, number
    (example = 0.42)
4: The minimum and maximum number of soldier in each squad as an array: [min,max]
    (example = [1,4])

The position parameter is usually a variable, but it can be literally an array in format [x coordinate, y coordinate, z coordinate].

If you wanted to place another enemy squad near the PoW objective you could open the init.sqf for editing and enter these commands:

```
_enemyGroupTwo = [[3400,5700,0], EAST, 0.2, [2,4]] call
Zen_SpawnInfantry;
```

In the ARMA editor, the X,Y coordinates map to the cursor and are displayed at the bottom of the screen. Even though that position is 50+ meters above sea level it's not necessary to specify the height.

EAST and WEST are ARMA reserved words, they are constant values. The SQF language is insensitive to case but the side constant is often shown upper case in tutorials for emphasis. EAST maps to OPFOR (Opposing Force); WEST maps to BLUFOR (Blue Force). You can't substitute values 'BLUFOR' and 'OPFOR' for WEST and EAST.

The skill level is any number in decimal format. To add some variety to you missions you can generate a random decimal number with random 1.

```
_enemyGroupRandom = [[3400,5700,0], EAST, (random 1), [2,4]] call
Zen_SpawnInfantry;
```

To create a squad with exactly X infantry units enter numeral '4' or enter [4,4].