

## **Tutorial Description**

Hello and welcome to the Mines Tutorial.

This is a tutorial designed to teach players the fundamentals of mining and mine-clearing operations in CMANO.

In this tutorial, the following topics will be covered:

- How to create a naval minefield.
- How to conduct mine-sweeping operations..

Created by Andrea D., a.k.a. SirAndrew

## **Briefing**

Welcome to the Mines Tutorial.

In this scenario you will be guided through the following topics:

- How to create a naval minefield.
- How to sweep for naval mines.

In this scenario pop-ups will appear with important messages. You can find them in the document that comes with the tutorial or you can open the message history in a second window by pressing Ctrl+Shift+M and scrolling to the appropriate message.

Note: To successfully complete this scenario, you will need to use the knowledge gained in the previous tutorials, in particular **Flight Tutorial 1 - Basic Manual Flight Tutorial** and **Flight Tutorial 2 - Unattended Flight**.

### **Message 1**

Good morning!

Today you will impersonate a US Navy Commander tasked with mining and mine-sweeping operations near Yemen.

Intelligence told us that the Houthi rebels have mined the Bab el Mandeb Strait, blocking one of the most important trade routes in the world.

It's imperative that this area is cleared of mines soon as possible, so that commercial shipping can resume. For this task, you have under your command 2 Avenger-class Minesweepers, MCM-3 Sentry and MCM-6 Devastator. A Fleet-class CUSV is also attached to your command.

The flagship of the operation, providing close-escort during mine-sweeping operations, is DDG-113 John Finn.

You also have 12 helicopters for the task, based at Camp Lemonnier in Djibouti.

These are 6 MH-60S Knighthawks and 6 MH-53E Sea Dragons.

Meanwhile to the north, the Saudis are trying to blockade the port of Al Hudaydah by mining the approaches. They have hastily modified MSC-412 and an LCU to conduct mining operations and they are protecting this force with the frigate 812 Al Riyadh.

Due to the difficulty of this operation, they have asked our help and we have been ordered to take them under our command. Furthermore, 6 P-3 Orion have been detached to Camp Lemonnier to conduct aerial mining in the area.

You have 8 hours to complete these tasks, so let's get moving!

### **Message 2**

The Mine-Clearing Mission and the Mining Missions have already been created.

The area of the first one is delimited by the 4 RP named "Mine-Clearing", while the second one is delimited by the 4 "Mining" RP.

So you only need to press "F11" or go to the Mission menu and select the first option "Mission Editor" and a new window will appear, then in the upper left corner select "Mine Sweep".

You should already know how the Mission Editor window works, so after assigning the 6 MH-60S and the 6 MH-53E to the mission, you are ready to proceed.

In the centre of this window there are various mission parameters, but the default settings are good and you shouldn't change them.

At the start, as the strait is quite full of mines, you should keep the MCMs out of it, as they tend to be damaged (mine-sweeping is a dangerous task!).

The best way to conduct the sweeping is by using helicopters, that are flying out of the harm's way.

The helicopters at Camp Lemonnier have various mine-sweeping loadouts, as it's better to mix them up in the sweep, having helicopters with towed sonar (AN/AQS-232 AMNS) detecting mines and then helicopters with towed mine sweeps (A/N37U and Mk106) destroying them.

### **Message 3**

Open again the Mission Editor window and this time select the "Mining Operation" mission.

Add the 6 P-3C Orion Update III AIP, the LCU (Iran Ajr) and the MSC 412 Addriyah.

Then, in the central section, change the "Mine Arming Delay".

This is the time after which the mines will go active, and by default is set to 2 hours.

However, having mines activating while you are in the area is not an option and 2 hours is very little time.

To avoid friendly-fire incidents, increase the delay (for example to 6 hours).

Then, below this, change the Flight Size of your airplanes to Section (2x aircraft) to have 2 P-3C flying together.

You shouldn't need to change the other settings, so when you are ready close the Mission Editor window and proceed.

#### **Message 4**

The sweeping should be proceeding well by now and it's time to send your MCM ships in.

As the area you are sweeping is limited, the better option is to control them manually.

So, select them, plot a course and switch on the sonar.

Then, in the Unit Status window, click on "MCM/Pod Equip" button and a new small window will appear, displaying all the MCM Systems on the ship.

On the left you can see the names of the various Sensors, with a description of the Sensor on the right.

Then there is the "Active" column, and here you have to check the Sensors you want to activate.

Then, on the right, you can see the Status of the Sensor (Operational, Damaged etc.).

When you have activated the Sensors, close this window.

You will now see a little light blue triangle following the ship. This represents the sweeping area, and you have to put this triangle over a mine to detonate it.

As you can see, this "sweeping triangle" is close to the ship, and this means that mines will detonate dangerously close to your MCM.

The best tactic to sweep mines avoiding damage is to measure the "sweeping triangle" length and never get closer than that to a mine; then when you reach this "limit measure" then turn the MCM 180°-200°.

This will bring the sweeping systems over the mine, detonating it a good distance from the ship and hopefully avoiding damage.

#### **Message 5**

By now the area in front of Al Hudaydah should be full of mines.

It's time for your ships to leave the area before the mines activate.

To do so, open the Mission Editor and switch the Mission Status to "Inactive" (or unassign the units).

Then, select the ships and plot a course out of the area.

#### **Message 6**

The Bab el Mandeb Strait should be now clear of mines and commercial shipping can finally resume.

Well done, you have learned how to deploy mines and how to sweep them!

