SinkingShips (V1.0)

Flight created on 20.09.2026

Estimated flight duration 15-30 min.

Difficulty: Easy

Task: Play battleships with any aircraft.

Introduction:

After successful TicTacToe- and MemoryFlug-missions, I have now created a SinkingShips-mission.
Here you can fly this game.

The mission was created completely without programming languages or scripts. I built the scenario purely with the standard components of the SimDirector such as areas, triggers and actions. For exactly this reason, I faced great challenges:

1) How do I create a working query for 1-tile, 2-tile and 3-tile ships? How do I display hits or misses and make the complete ship visible only when "sunk"?

2) How do I hide the ships randomly on the playing field while respecting the distance rule?

3) An intelligent AI is supposed to act as the user's opponent (meaning your opponent). It shoots at your own fleet of ships and, depending on the difficulty level, sinks all your ships with pinpoint accuracy on the 27th or 33rd shot.

There were many construction sites, which is why I unfortunately had to make a few compromises:

a) The user cannot hide their ships themselves. The query alone, whether a ship may be placed at a specific position (distance rule), would have caused the number of objects to explode. Besides, probably nobody wants to manually place six ships before every game before it finally starts.

b) You see the opponent's playing field. Your own playing field remains invisible. Your ships are hidden there randomly as well. This display would have doubled the number of objects. With over 6'000 objects, the SimDirector would have mercilessly brought to its knees.

c) I wanted to display sunk ships burning and smoking. However, these particle effects are extremely performance-hungry and cause the framerate to drop. Additionally, they obstruct the view of the playing field, which is why I left them out.

Therefore, the title "SinkingShips" is actually wrong. A hit ship is only marked on the playing field by black squares first. The ship itself only appears when it is completely destroyed. But I think that is not tragic. In the original on paper, you also only mark the complete ship once it is sunk. So this is certainly completely okay.

Game rules:

Fleet:
There are 6 ships hidden on the playing field:
2x 1-tile ships (Destroyers)
2x 2-tile ships (Cruisers)
2x 3-tile ships (Aircraft carriers)
The ships can be placed horizontally or vertically.

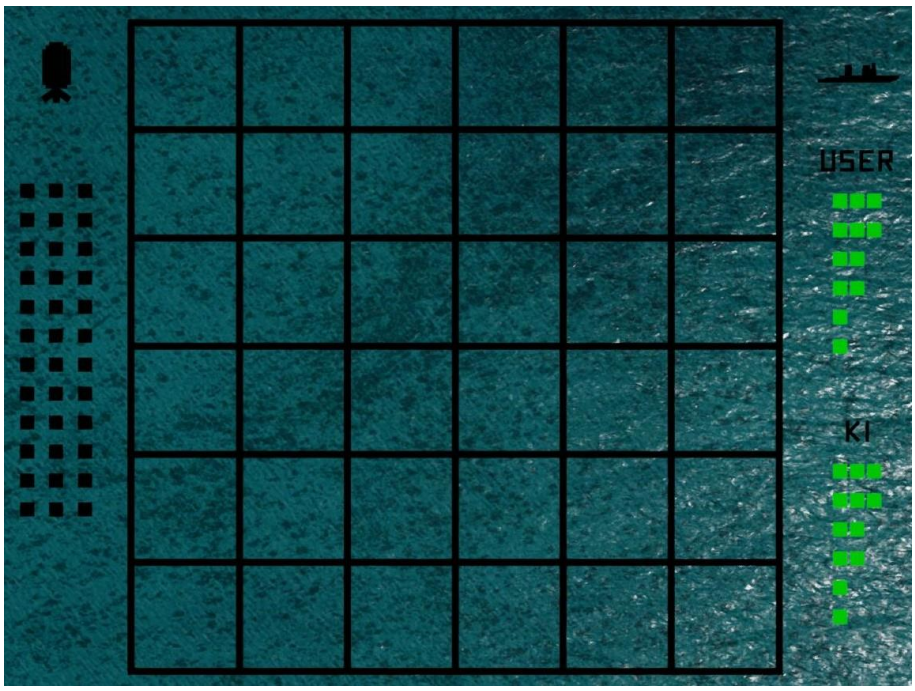
Distance rule:
All ships must maintain a minimum distance of one tile from each other. They must not touch at the corners either.

Gameplay:
User and AI take turns shooting. The user begins the game.

Shot:
A shot is triggered with the "Drop Objects" command, which is operated with "Shift+D" by default.
I recommend assigning this command to the trigger button of the joystick.
To do this, search for the event "Release Droppable Objects" in the Key Assignments and assign it to the joystick accordingly.

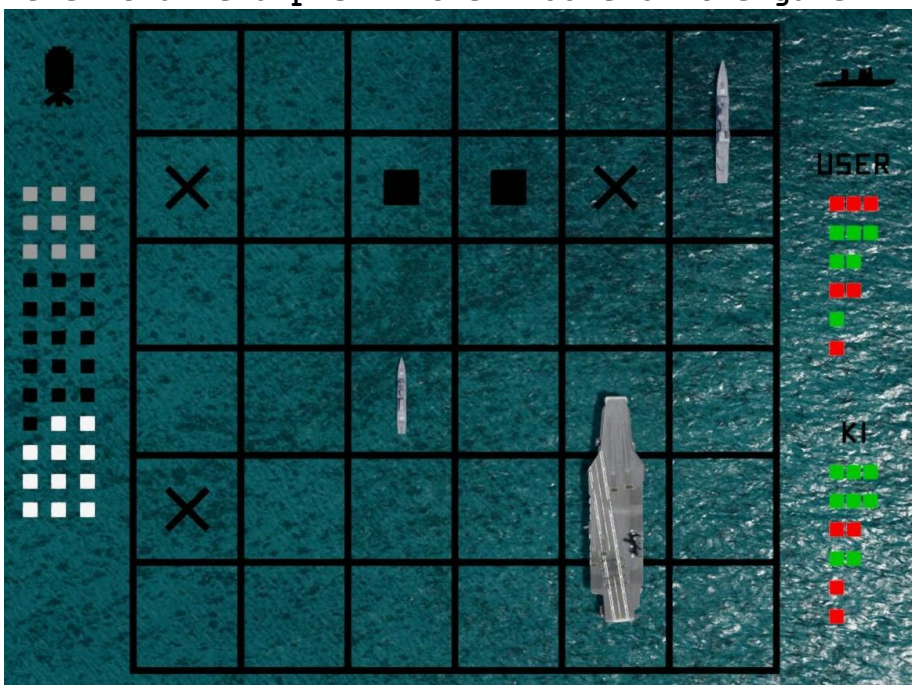
Objective:
Whoever is the first to completely sink all opponent ships wins the match.

Playing field:
The playing field is located in the sea, about 5nm from the starting position.



- To the left of the playing field, you can see the available ammunition (36 shots) as black squares.
- On the top right, you can see the status of the user's ships, and below that, the status of the AI's ships:
Green = "living" (not sunk) ship
Red = sunk ship

Here is an example in the middle of the game:



- The 9 grey squares (top left) show the "danger zone":
Here at medium difficulty; the AI will sink your last ship with shot 28-36.
- The 11 white squares (bottom left) show the expended ammunition.
- On the right, you can see that 1x 3-tile, 1x 2-tile and 1x 1-tile ship have already been sunk.
The AI has also sunk 3 ships: 1x a 2-tile and 2x a 1-tile ship.
- On the playing field, you can see the sunk (3-tile) aircraft

carrier, the (2-tile) cruiser and the (1-tile) destroyer.
- In addition, 2 black squares are visible, which show a "damaged" ship.
- The 3 X show water misses.

The flight:

Weather and visibility:
The weather is cloudless and almost calm, because it is difficult enough to hit the desired tile even without wind and visibility restrictions.

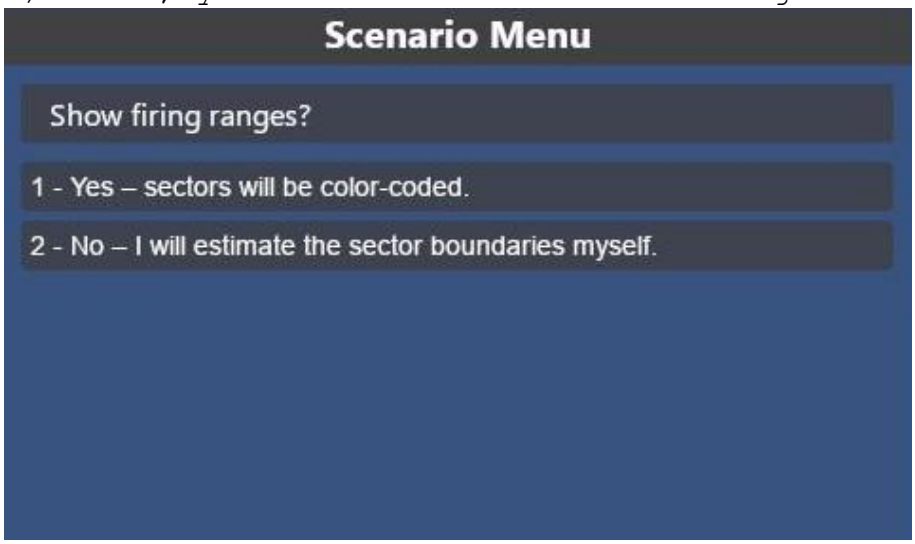
Crash:
A crash is handled as usual and leads to a reset of the mission.

Victory:
In the event of a victory, the corresponding goal is displayed as accomplished (Mode Hard/Medium/Easy won).

Defeat and open-end:
In the event of a defeat, "Goal Failed" appears along with a text informing you that you can dismiss the window and still keep shooting to find all the ships. After all, you should get the proof that the ships were regularly placed while respecting the distance rules.

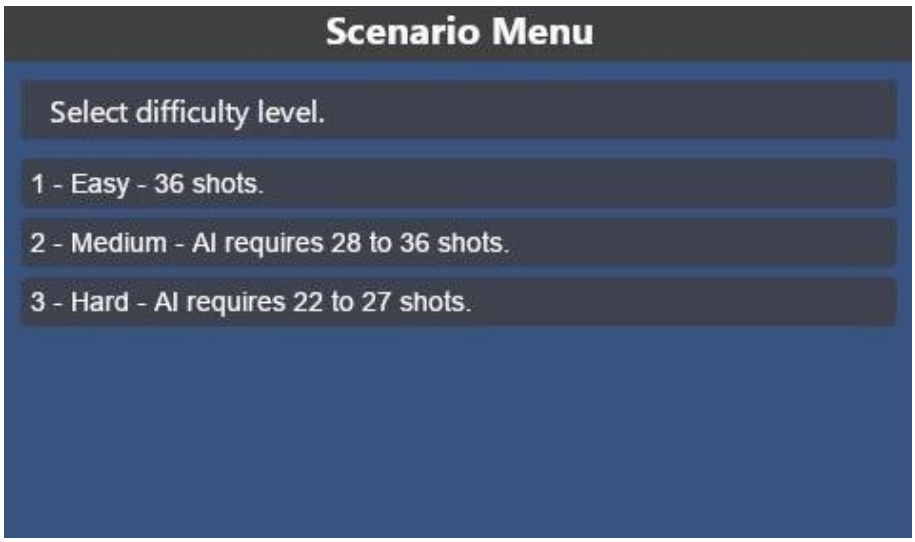
Game start:

1) First, you choose whether the shooting areas should be visible.

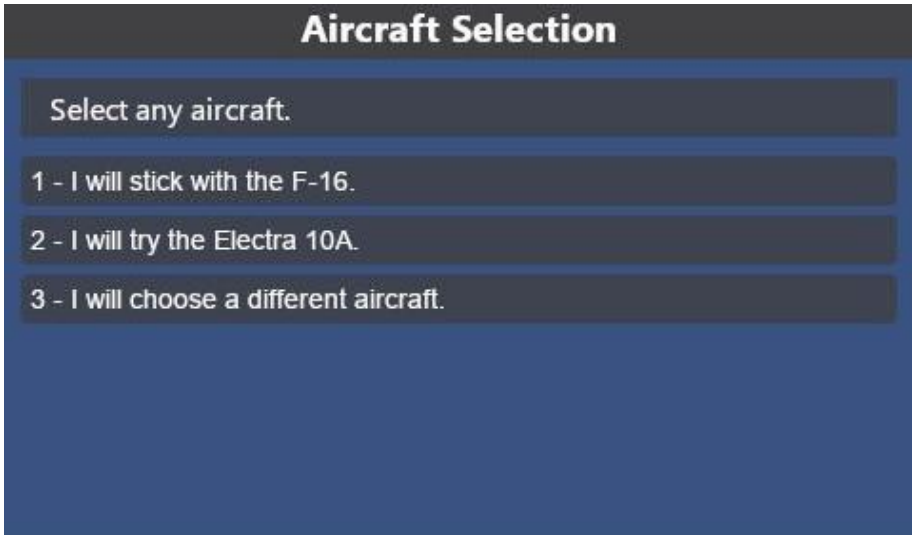


The shooting areas are only faded in during the approach just before the playing field. They help you to shoot at the correct tile. More on this below under tips.

2) Now you choose the difficulty level.



3) Finally, you can choose any aircraft.



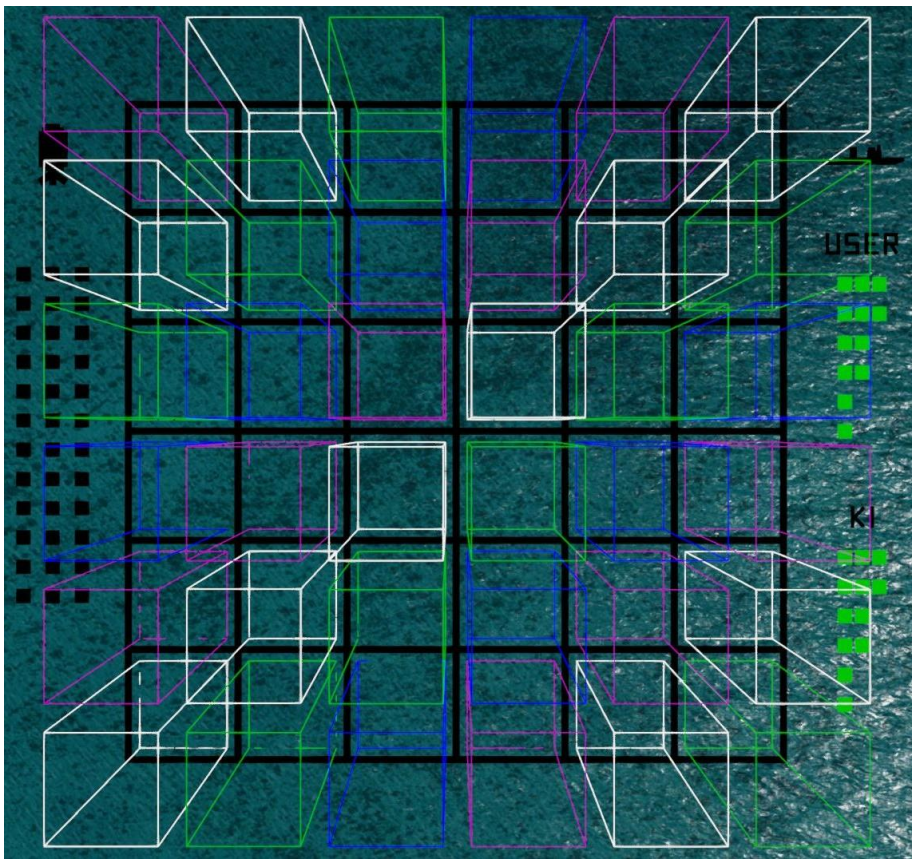
Any aircraft is allowed: from helicopters to the AN-225 to gliders.

Then take off, fly to the playing field and fire the first shot.

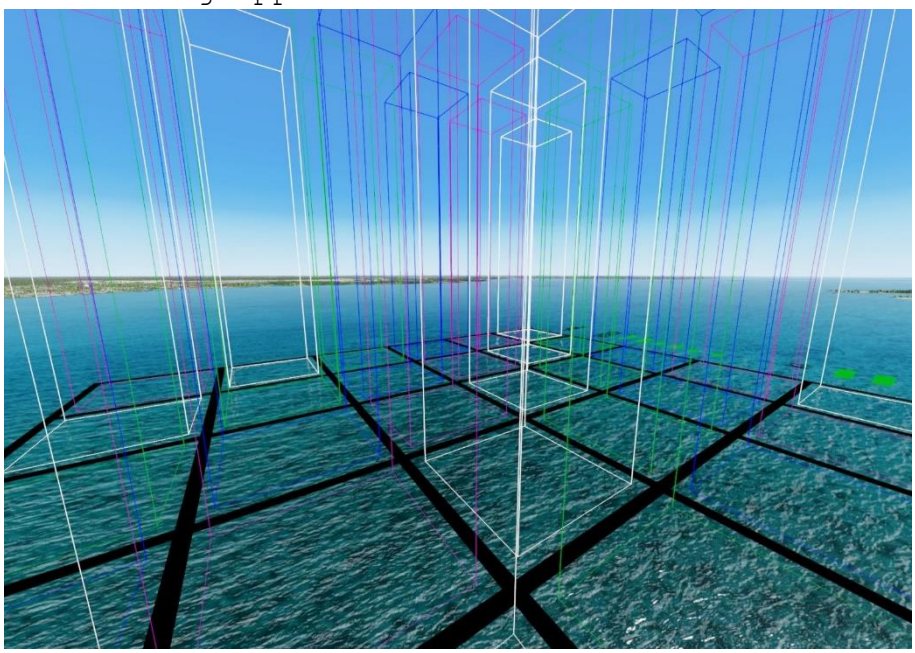
Tips

Misses
A tile that has already been shot at can be shot at again, regardless of whether it resulted in a water miss or a hit. This should be avoided, because for such double shots, an ammunition unit is also deducted.

Shooting areas
To make it easier to shoot at a specific tile, the shooting areas can be displayed:
View from above:



View during approach:

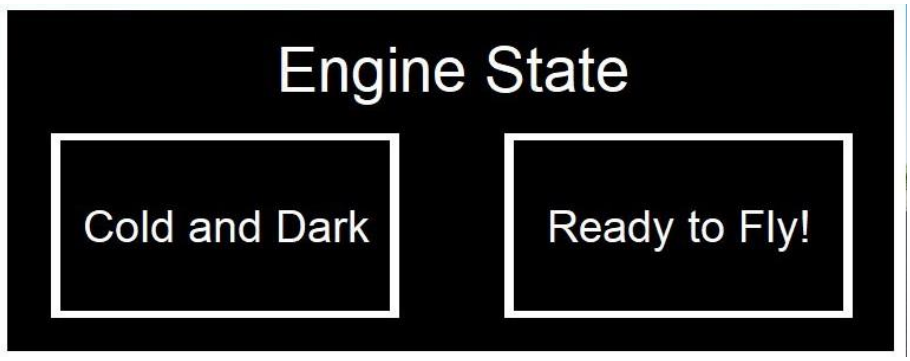


If you fly without this colored help, I recommend extreme low-level flight so that you can estimate which tile you are currently over.

Flight with the F-16

Although the engine of the F-16 is running at game start, the aircraft is not ready for takeoff. You can, of course, get the jet ready using the checklist; it is easier via the menu "Vehicle/Instrument Panel/Engine State".

Select "Ready to Fly!" in the menu that appears.



Flight with a glider

When choosing a glider, thermals around the playing field are automatically activated:

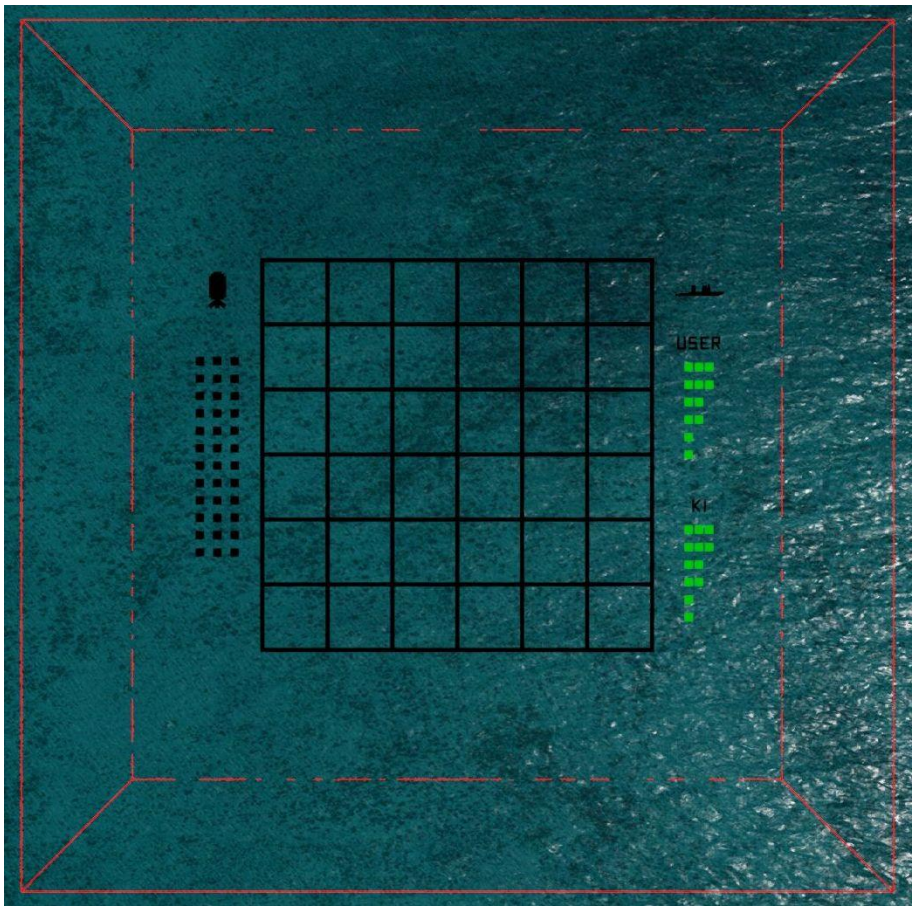
For takeoff, you must request a tow plane; use the key combination "Shift+Ctrl+Y" for this.

Have yourself towed to a suitable flight altitude and release yourself from the tow plane with "Shift+Y".

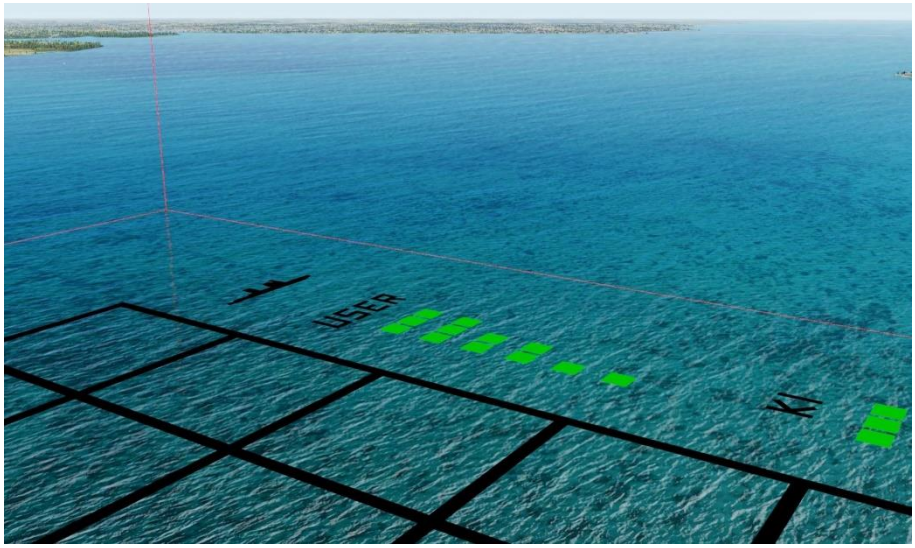
Speed and approach technique
If you are flying with the F-16, I recommend flying as slowly as possible (max. 200-250 knots). If you blast over the playing field at 500 or more knots, it is practically impossible to hit a tile intentionally. I also recommend an approach at about 1000 feet altitude and only going into a steep descent close to the playing field. This allows you to aim at a tile specifically.

Leaving the play area
After each shot, you must leave the play area; before that, no new shot can be triggered.
If you try to shoot again beforehand, a corresponding text notification will be displayed and the area to be left will be shown with a red frame.

View from above:

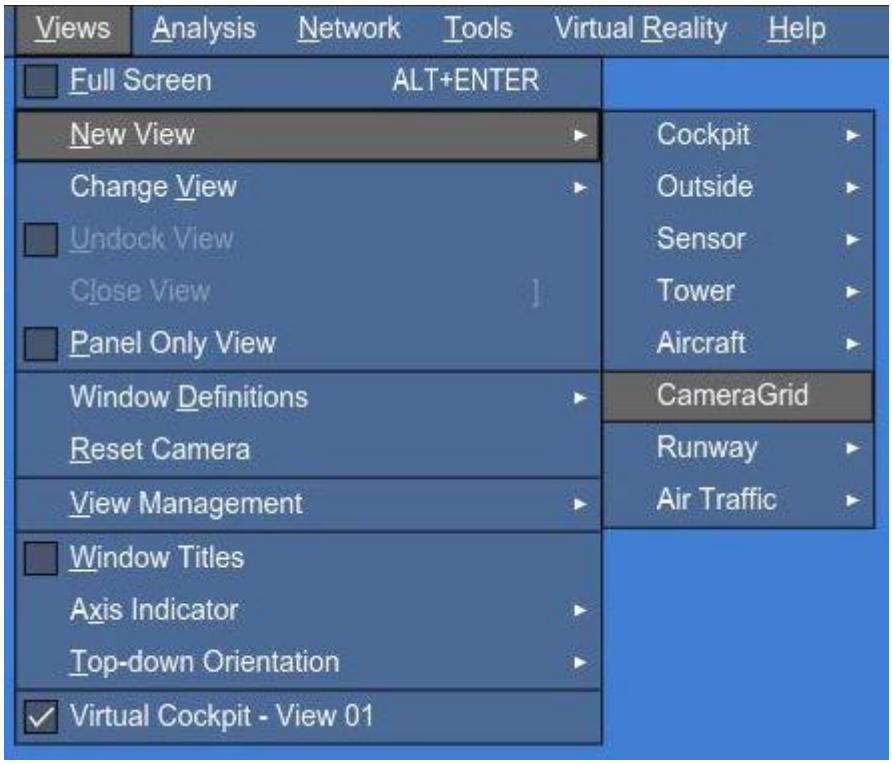


View from the cockpit:

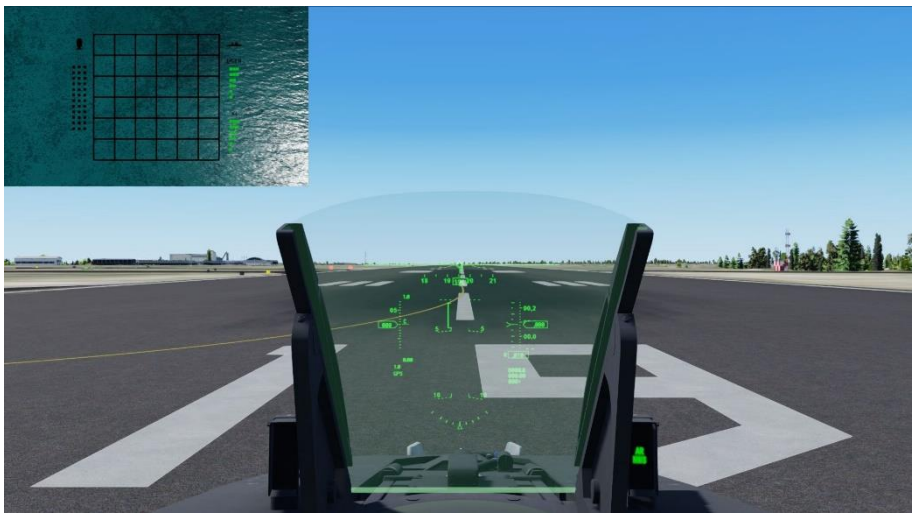


The reason is simple: After each shot, a floating window is displayed showing the hit or water miss. Afterwards, the AI has to shoot, and only then is it your turn again. This procedure takes about 20 seconds, which you can use perfectly to leave the play area.
When playing with a helicopter, you must therefore not hover over the tile waiting for the next shot.

Playing field camera
To make it easier to keep track of previous hits, you can fade in a playing field camera.
Select "View/New View/CameraGrid" in the menu:



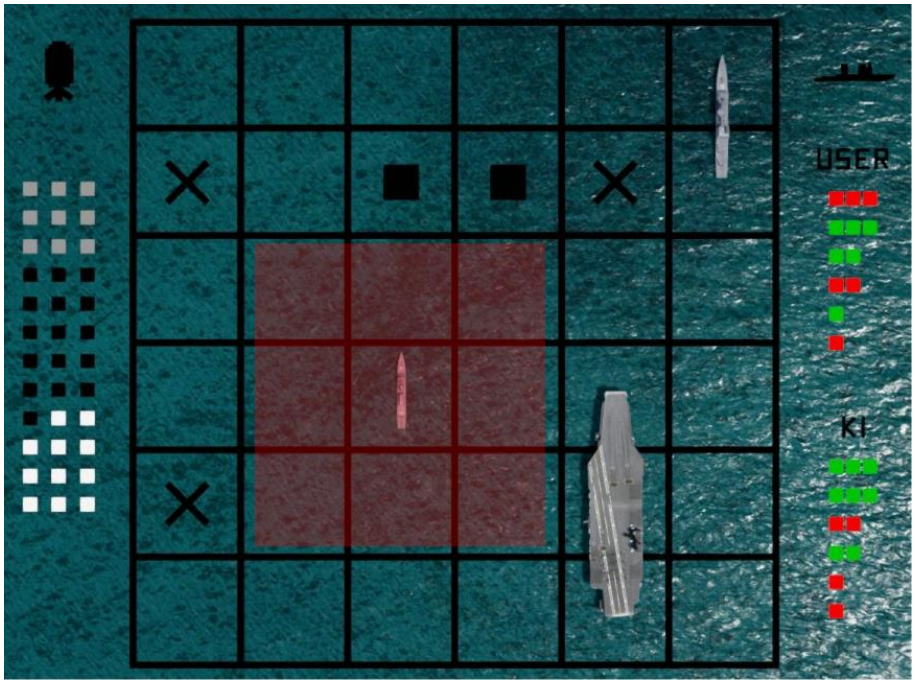
Place the window that appears at the top left:



At this position, the window obstructs neither the view of the playing field nor the text notifications.
Alternatively, you can move the window to a second monitor.

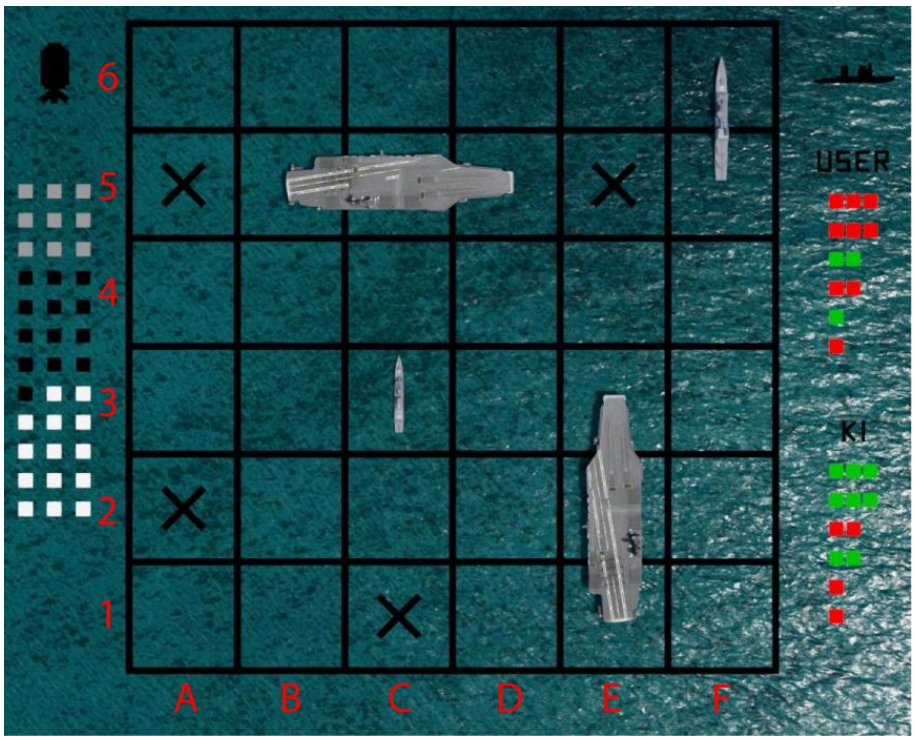
Tactics

As the game progresses, more and more tiles are revealed. Every hit is worth its weight in gold, because it excludes many tiles from further shooting:

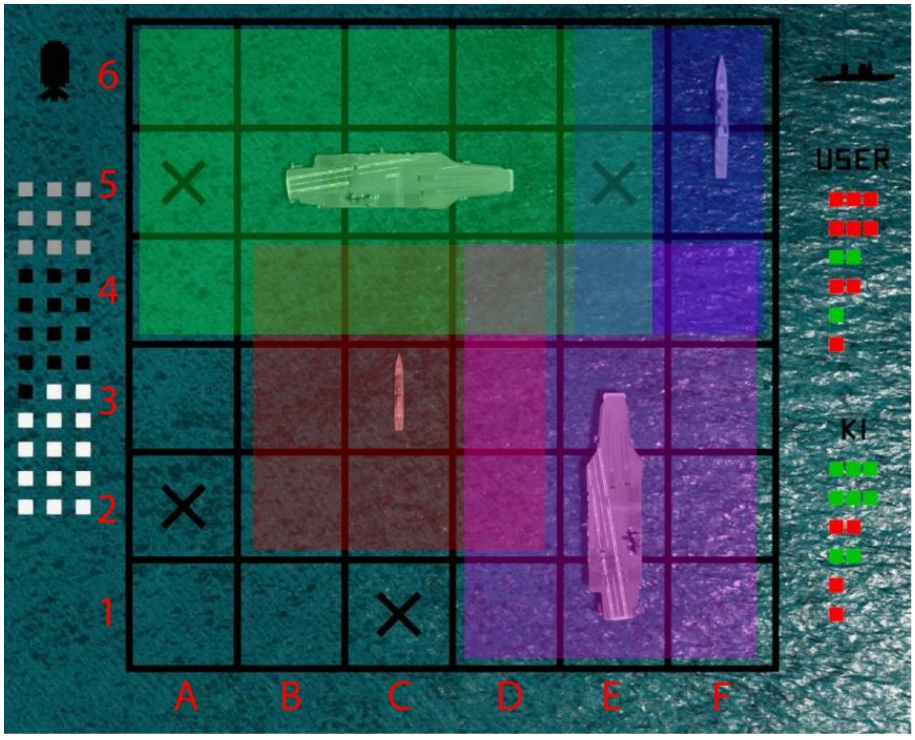


The sunk 1-tile ship excludes the 8 surrounding tiles marked in red.
A ship placed in the center of the playing field excludes more tiles than a ship at the edge (5 tiles) or in a corner (3 tiles).

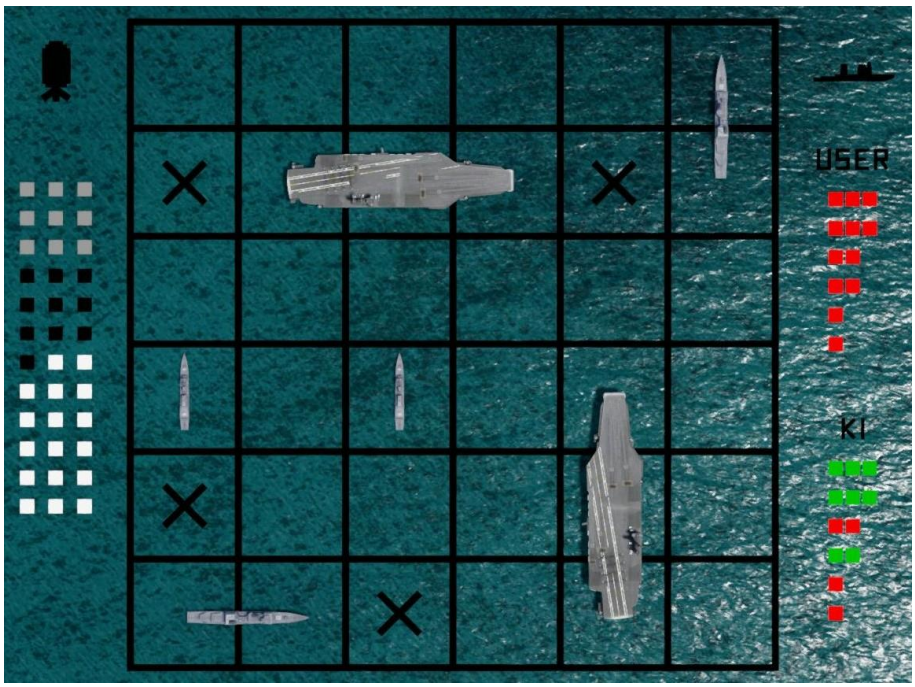
From a certain point on, you can pinpoint the exact location of the remaining ships.
In this example, only 1x a 1-tile and 1x a 2-tile ship are still missing. Can you spot where they must be placed?



Correct, the only position where the 2-tile ship still fits is tiles 1A/1B.
Therefore, the 1-tile ship must be on tile 3A, all other positions are excluded.



Here is the proof at the end of the game:



I hope you enjoyed this flight, if so please give feedback to p3d@andi20.ch . Also send error messages (spelling mistakes, wrong information, etc.) to p3d@andi20.ch, I appreciate any feedback.