## We are proud to introduce a new feature to our civilian ops server: Fire Fighting!

First things first, like our Search and Rescue feature this is of course an approximation based on what DCS currently allows us to do, which is pop smoke and adjust aircraft weight. Nevertheless we did our best to immerse you into an intense fight against time. The longer it takes the bigger the fire will get. It starts with just one small fire but it will grow fast.

To fight fires all you need to do is pick up water with your Helicopter. Since we cannot change the weight of sling-loads we opted for belly-mounted tanks for now, similar to those used for instance by Cal Fire (http://www.rvcfire.org/stationsAndFunctions/OpsSppt/HRAAB/PublishingImages/H301%20water%20drop. jpg). The tank is filled by dipping the hose of to the tank into water (you really just need to hover above water!) and wait until a pump has filled the tank. You can use either the sea, a lake or just a small river. Sounds simple right? Just keep in mind your helicopter will gradually become heavier, you'll have to keep pulling collective to keep your helicopter out of the water!

To drop water you use the F10 menu, F1 will release your load until it's empty. We would have loved to give you the option to bind it to a joystick button or similar, but there is no such API currently in DCS that also works in multiplayer. Bummer, we know.

To extinguish fire there's obviously multiple ways. The simplest way is to drop water directly over fire to extinguish it. If you dropped enough water the fire will go out. If it wont go out it will at least burn for a shorter time than before the water drop. But keep in mind the fire will spread! A more effective way to fight the fire from spreading is to drop water in front of the fire to prevent it from spreading.

The most effective way to extinguish a fire is as follows: Drop one load from the outer left side of the fire for as far towards the center as you can. This will prevent a small strip of fire from speading further. Now return to your next water source and refill your tank, this time you start from the right side of the fire and also cut a strip of growth off from the side. By the time you refill and reach the left side again, you should already see in the smoke that the fire has spread more towards the center. What you want to do is narrow the path of the fire with every pass you make. Ultimately the fire will stop spreading, and you can focus on dropping water directly onto the fire to extinguish it completeley.

But don't worry, once the fire has stopped we will immediately spark a new one for your pyromanic pleasure.

## Frequently asked Questions:

• I've dropped water directly on the fire but it's still smoking:

unfortunately we are bound to the limitations of DCS. While we can pop smoke easily, we cannot remove it. Fortunately smoke in DCS only lasts for 5 minutes, so after that period we check if the fire is still burning and pop another smoke or not.

• Why are you not using the big black smoke effect?

While the big black smoke would for sure be way more visually pleasing, this smoke will for one never disappear and even worse, if you join the server after this smoke was created you would not see it at all. We'd love to use the bigger smoke though!

## • Why no bambi bucket?

We've spent a lot of time researching, writing and testing code snippets. While we could get it to work somehow it would be quite a hack, so we decided the way we implemented it now is the easiest, most believable and most reliable way to do it at this moment of time. We'd love to hear your ideas on how bambi buckets could work and would still like to add it in the future.

## • How exactly does the fire system work?

It's of course a very simplified system. The fire is spread on a rough grid of 50x50 meters. When you drop water the position is approximated to this grid. This way we could have a few thousand fire cells without complex math and tons of computation power reqired. To hide the visual grid effect the smoke positions are randomized on that grid to avoid patternization. The fire growth is also very simple: when a new fire sparks it will also create two seedlings that travel along the wind-axis in a 6 degree cone. If a fire-seedling reaches a fresh grid it sparks a new fire. If there's already water this grid it wont spark. For the time being it does not matter how much water there is on the grid.



