

Notes on IL2 Sturmovik Cliffs of Dover

These are explanatory notes, not a comprehensive manual.

This is (and always will be) work in progress.

Version 1.6 – Game version 5.0.42

Changes since previous version: Loadouts

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Terms

userdoc: User's documents: usually "MyDocuments\1C SoftClub\il-2 sturmovik cliffs of dover"

game-install-folder: Where Cliffs of Dover is installed. Usually: "C:\Program Files (x86)\steam\steamapps\common\IL-2 Sturmovik Cliffs of Dover Blitz"

server: The physical machine (PC/server) the **gameserver** runs on

gameserver: Cliffs Of Dover when started as server

client: Cliffs Of Dover when started normally

Part A: Configuration

I Ingame

See [Options](#)

II Files

1 conf.ini and confs.ini

2 confUser.ini

3 rcu and srcu

rcu is used when started as **client**, srcu is used when started as **gameserver**.

The **userdoc/(s) rcu** file is always loaded at the start. If it contains console commands (see section "[The Console](#)"), these are automatically executed just as if you've typed them into the console yourself.

4 user.ini

Do not edit. Contains your selections from ingame Options, Pilot and Options, Plane (such as convergence, beltings, etc.)

III The Console

This is explained in detail in the [Server Administrator's Manual](#), because it's mostly used by server admins, so please look there for how to use it.

But, as usual, there's an exception: mp_dotrange, which is important for single player, too, as it configures the visibility distance of target dots.

Part B: Ingame Options

I Plane

Very important: If you do not leave this option via the "Apply" button, any changes to any aircraft you made since entering this page will be lost, so please do take the warning "Discard all changes? Yes, No" serious.

1 Loadouts

There are 4 layers of Plane Configuration definitions:

1. *plane-default* (what the game pre-defines)
2. *user-default* (what you configure in Options => Plane)
3. *mission-set* (what the mission's creator defined)
4. *user-set* (what you configure for the individual plane you're about to spawn in)

The final Plane Configuration active when you actually enter the cockpit is the sum of these four applied in exactly that sequence.

As an example lets take a Spitfire Mk I with 8 guns: *plane-default* defines all 8 belts. You changed the default belting for gun 1 only, so *user-default* contains only a belt for gun 1. The mission builder defined special belts for guns 2 through 7, so the *mission-set* contains belts for those 6 guns. The 'sum' of that (level 1, 2, and 3) will be: gun 1 belted from *user-default*, guns 2 through 7 belted from *mission-set*, and gun 8 belted from *plane-default*. This is what you see when you enter Plane Configuration just before hitting "Fly" and entering the cockpit. You now decide to reconfigure belt 3, so belt 3 will be belted from *user-set*.

There are some restrictions: In Multiplayer the *mission-set* may restrict the "Weapon-Sets" you are allowed to choose from for *user-set*. In Singleplayer, the *mission-set* fixes the Weapon-Set (including Fuel) and also "Army", "Country", "Type", "Regiment", "Squadron", and "Callsign" - so these are not configurable as *user-set*. But by using "Custom" before you start the Singleplayer mission, however, you can choose any of the presets as Weapon-Set of the respective flight group.

In the game exist four different scenarios where you can view and edit Plane Configuration(s), and they behave and effect differently - even if they *look* very similiar.

(A) Main Menu => Options => Plane

Page's title says "Plane Default Configuration".

This is where you configure your *user-default*(s) for the planes: These will be saved permanently (user.ini) and applied on top of *plane-default* to any plane you will spawn in. The configuration you see here is *plane-default* plus *user-default*.

(B) Singleplayer, after mission started, before spawning, page "Battle Intro", button "Plane"
Page's title says "Plane Configuration".

This is where the you configure the actual, specific plane you're about to spawn in. Any changes you make here are *user-set* and valid for **this** plane in **this** mission only. The configuration you see here is *plane-default* plus *user-default* plus *mission-set* plus *user-set*.

(C) Multiplayer, connected to a server, page "Battle Intro" ("Server Briefing" on self-hosted) Page's title says "Configure And Select Plane".

This is where you select the plane you want to spawn in and you can configure that specific plane-type for the duration of the session. Any changes you make here are *user-set* and valid for **this plane-type** during **this session** only. The configuration you see here is *plane-default* plus *user-default* plus *mission-set* plus *user-set*.

(D) This is when you are actually in the cockpit. In this scenario you can inspect the active configuration, but you cannot change it anymore. In Singleplayer you reach this with <Esc>, Options => Plane; In Multiplayer you reach this with <Esc>, button "Plane".

The "Presets" you can create, load, and delete in "Weapon sets", "Guns", and "Bomb fuzes" are always editable and saved immediately. Loading a preset is subject to possible restrictions from the *mission-set*, e.g. not possible for "Weapon sets" in a Singleplayer mission.

There are two small "exceptions from the rule":

- Gun convergence is not part of gun-presets and is not available as *mission-set*
- Fuel (in "Weapon sets") is exempt from *user-default*: it only exists as *plane-default*, *mission-set*, and *user-set*.

1.1 Fuel [%]

All Aircraft have specific minimum fuel limits that (in multiplayer) cannot be gone below (see [Aircraft's Minimum Fuel](#)).

All Aircraft have an individual default load, too.

Note: This setting is **not** saved into configuration files and therefore is only retained until you exit the game. At game startup it always reverts to the aircraft's default value. This is to prevent you from accidentally starting with the 20% fuel from that mission last week.

Normal takeoff weight: This is a nominal value which can be exceeded. But pilots have to be extra careful when flying with a load exceeding this value. The more you exceed this, the easier your aircraft might be damaged at high g manoeuvres. For example, the Hurricane II manual specifies when carrying bombs pilots are prohibited from carrying out acrobatics, long steep dives, rolls, loops, etc.

Multiplayer mode: If you come to this in multiplayer (flag, aircraft select, loadout), you can change the fuel amount for the aircraft your about to spawn in.

Single Player mode: The amount of fuel is set by the mission's builder and cannot be changed in either Single Missions and Quick Missions – but you can always load the mission into the Full Mission Builder and tweak *everything* to your liking.

1.2 Weapon sets

1.3 Guns

1.3.1 "Main" and "Residue"

"Main" is the belt itself. "Residue" is the end of the belt. It allows you to have different ammunition for the last X rounds in the belt. You could, for example, use this for warning you that the end is near by having a different tracer colour in the last 40 rounds.

When you configure a belt here, you actually configure a *sequence* - which will be repeated until the end of the belt – unless you also defined a residue sequence, which will be repeated for the last X rounds of the belt

When you define the residue belt, do not forget to specify the total number of rounds: If you have '0' rounds in the residue, it's definition is not saved either!

1.4 Bomb fuzes

II Video

1 Buildings Detail

Low ... High: sets the amount of detail with which buildings are rendered.

Near ... Far: sets until which distance the buildings are rendered fully detailed. "Distance" is not absolute but diminishes as amount of simultaneously visible buildings increases.

2 Far Static Shadows

Off: Shadows are drawn only within a 600m radius around the viewpoint

On: Shadow are drawn beyond 600m and up to 3000m

III Controls

1 Keys

1.1 Category "Camera"

1.1.1 Hold to Zoom Camera

A key to hold while moving the mouse simultaneously. "Zoom" is the best word, but actual behaviour depends on the situation / part of the game you are in:

- In cockpit: moves the camera position forward/backward and left/right within the space allowed
- Outside: moves the camera's position (relative to the aircraft) forward/backward and left/right (latter limited)
- Full Mission Builder's 3D-mode: Zoom in and out relative to the anchor

1.1.2 Hold to Offset Camera

A key to hold while moving the mouse simultaneously. "Offset" is the best word, actual behaviour depends on the situation / part of the game you are in:

- In cockpit: nothing
- Outside: moves the camera's position (relative to the aircraft) up/down (limited)
- Full Mission Builder's 3D-mode: Move the anchor

1.2 Category "Chat"

1.2.1 Send Message

(a) If chat is not open/active: this opens/activates the chat and places cursor in message field.

(b) If chat is already open/active: if there's something in the field, it will be sent, then the chat will be closee/deactivated.

1.2.2 Toggle All Windows

This will hide or show all the info windows that you have configured (also hide the Net Stats if shown). Note 1: If you have used this to hide all windows and then use Send Message, Toggle Net Stats or Flash Net Stats, this will unhide all windows, too. Note 2: The current status will be remembered until you exit the game, but not beyond.

1.3 Category “View”

1.3.1 Padlock View

Lock view on a visible target. Actual ability depends on realism settings (Options Realism - or of the server in multiplayer). See Notes on [Padlock View](#).

Part C: Miscellaneous

I Aircraft’s Minimum Fuel

All aircraft have a minimum fuel property that a player cannot go below in the loadout settings in game. That means a player cannot spawn with less than that in a multiplayer game. This property is plane specific.

This restriction does not apply to the fuel amount a mission builder sets in the Full Mission Builder for any AI flown aircraft (multiplayer or single player mission or campaign) or the player's plane in a single player mission or campaign. No fuel setting is touched in existing missions.

In any multiplayer mission the mission builder can circumnavigate this restriction via the Rearm/Refuel functionality: It can respect the individual plan's minimum fuel property or just ignore it.

The SampleMission (\geq v1.0.8) contains example code for this. The CRearmRefuel (\geq v1.0.3) has a simple switch for it: [SampleMission](#).

II The Mission (or ‘Tab’) Menu

1 Ground Control (“7”)

1.1 Request Targets (“1”)

Simulates contacting Ground Control with a request for mission and target information. Information is both displayed in an “Info Window” (if present and configured, see manual) and in speech (if so configured (see Options, Audio, Voice)).

What information you are supplied depends on Options, Realism, “Other Aids”, “No Groundcontrol Targets” (which in multiplayer is controlled by the server).

Regardless of the type of the vehicle you are in, you’ll get bearing and distance to the next waypoint in your mission (“Mission target Bearing”). If there were no waypoints or no waypoint is left, it gives distance and bearing to your homebase (where spawned).

The information on *enemy targets*, however, depends on what type of vehicle you are in. Currently three types of aircraft are supported: *Fighter*, *Sturmovik*, and *Bomber* (Note: As of 5.034, no aircraft is currently typed *Sturmovik*).

(a) If you are in a *Fighter*: For each type (*Fighter*, *Bomber*, *Sturmovik*) one line giving bearing and distance to the closest enemy aircraft (group) of that type.

(b) If you are in a *Sturmovik*: For each closest *Fighter* (group) and closest *Bomber* (group) a line giving bearing and distance. Additionally a list of the closest ground targets (bearing and distance): Maximum three - or two, if you have a *Fighter* and/or a *Bomber* close by.

(c) If you are in a *Bomber*, for the closest *Fighter* (group) a line giving bearing and distance. Additionally a list of the closest ground targets (bearing and distance): Maximum three - or two, if you have a *Fighter* close by.

The distance taken into account and displayed is the horizontal displacement, not the absolute distance in a 3D world: the distance of an aircraft 10km directly above you would be 0.

The selection of the enemy aircraft to be listed is based on these rules:

- The aircraft is within 50km from the player's aircraft ...
- **and** the aircraft is not closer than 5,000m ...
- **and** the aircraft is flying higher than 100m above ground or sea ...
- **and** it is the closest aircraft (group) of its type (*Fighter*, *Sturmovik*, or *Bomber*) to the player.

Note: Enemy fighter(s) being reported at 6km does not mean that there are no other fighters close (< 5,000m) to you. Keep checking your six. It also means that the reported bombers disappear (or are replaced by others further away) as soon as you get nearer than 5,000m to them.

The information displayed on enemy aircraft:

- If there's no aircraft (of that type) within the 50km radius, nothing is listed.
- The distance displayed is the horizontal displacement: If the target is 10 km above you and 5,000m to the south, the displayed distance will be 5km / 3mi.
- The biggest distance displayed is 15 miles (GB, US) or 30 km (all other countries), even if the target is further away.
- The smallest distance displayed is 3 miles / 5 kilometer – because if nearer than that the aircraft would not be reported anymore.
- The distance is rounded down to the nearest full mile / kilometer. For aircraft/countries using km, distances beyond 15km are rounded down to 15, 20, 25, or 30 km respectively.
- The bearing is rounded to the nearest full 30° (165° => 150° and 166° => 180°). The bearing is geographic (map), so you have to apply magnetic deviation to get the compass bearing.
- An idea of how big the reported aircraft group is. Note: This gives only a hint about the one group that closest aircraft is in. There might be no, some, or many additional groups close to it.
 - “Single”: The closest target is the only member of its group.
 - “Group”: The closest target is member of a group and the group contains more than one, but less than 11 aircraft.

- “Gaggle”: The closest target is member of a group and the group contains more than 10 aircraft.

The selection of ground targets ...

The information displayed on ground targets ...

III Padlock View

Acquire:

- When allowed by realism settings (Options Realism - or of the server in multiplayer)
- and when the object is closer than 3 km

Lost: When the object is 'not visible' (to the player) longer than 5 seconds. An object is 'not visible' when:

- It is hidden behind land
- It is hidden behind clouds
- It is hidden behind 'parts' of the players own plane

If the object is forward of the player, not all elements of the aircraft are actually considered hiding (e.g. the forward, top, and side of the cockpit are not, nor is the mirror).

IV Linux: Yes, it does!

A community member, Martinsyde, got *Cliffs Of Dover* running under Linux using Proton. He published detailed instructions here at github.com/coljac/cod-proton.

There's also [his thread at the ATAG's forum](#).

V Target Dots (mp_dotrange)

`mp_dotrange` is a setting, or rather *command*, that configures up to which distance *targets* are shown ingame. *Targets* are anything that can be attacked, or destroyed (both friend and foe): Aircrafts, ships, vehicles, buildings, etc. These *targets* are rendered in two ways: Within your vicinity as 3D models up to a specific distance (non-configurable and depending on type of target, e.g. big ships show further than a small aircraft). Beyond that limit *targets* are shown as simple 2D *dots*. The maximum distance for dots is 25 km.

This command is applied separately for friend and foe. With it you can configure the distance that targets are shown between 0.1 and 25 km. That distance is not absolute, but depends on the size of the target. Set at, e.g. 10 km, big ships will show beyond that, while small aircraft will not.

You can not only configure the distance the targets themselves are shown, but also at what distances the icon (or label) beside the dot displays (a) the colour (army: red/blue), (b) the player's name, (c) the ID, (d) the distance, and (e) the type - provided you allow these icons in the realism settings.

Important note: The distance you set for the DOT may also affect the rendering of the 3D models of certain target types. If you specify a dotrange lesser than the 3D rendering distance, e.g. `mp_dotrange DOT 0.1 (=100m)`, no aircraft beyond that will be shown. Ships are not affected. The 3D rendering distance for targets (depending on their size and type) is about 5 km.

This command can be entered (a) in the [console](#) and then is valid only for the current session, it can be (b) set in the [rcu file](#) and is then valid for all single player missions, or (c) can be set in the [srcu file](#) and then will be applied to all clients connecting to this multiplayer server.

See [Server Administrator's Manual](#) for all the details on the `mp_dotrange` command.

Use the [Contact Spotting Mission](#) to experiment and see effects.