



LittleWars

R0.7.11

30.07.2025

1: Mission Statement

Provide a persistent PvE dynamic battlefield strategic campaign.

Player actions have an impact on the campaign, as the progresses the dynamic side of the ground war provides a constantly changing tactical landscape.

Players actions have an impact on the ground-war, and can take direct control over the ground units or leave it to the script to handle things.

The opposition AI will attempt to counter the players actions, attacking and reinforcing as required. AI pathfinding will use a bespoke tree avoidance method to reduce frustration of DCS's invulnerable trees.

2: Introduction

This section gives a high level introduction to enable players get started.

2.1 The Map

The map is hex based, and coloured to reflect the ground war situation, with blue being friendly, and red enemy.

Black hexes show areas where there are either:

- both red and blue units, or
- no units but both red and blue units are adjacent.

2.2 Supply

Periodically both sides receive additional supply points that can be used for several things including:

- Sorties
- Ground unit Reinforcements
- Support such as AWACS calls

If supply is not used by players, then the script will start to spend it on what it thinks is useful.

2.3 AI: Sorties

The enemy AI will launch sorties against ground units based on the battlefield state.

The sorties range from a 2 ship conducting BARCAP to full packages of multiple aircraft taskings (SEAD, Escort, CAS etc).

Packages of flights will form up behind the frontlines and push onto target as a group.

2.4 AI: Ground Units

The AI will move to attack and reinforce as governed by some simple parameters.

The factors that influence the options for any given hex are:

- Supply points available.
- Hex distance from frontline.
- Hex distance from an airfield.
- The ground units in the hex.

Combined Arms (CA) is useful for seeing what is happening in the ground war, however the hex colours will give an idea of what's going on even without CA.

Note that the enemy units are not usually visible. You can log in to the Commander slot to view both sides.

2.5 Radio Menu

There are several commands in the user menu system that can be used to aid the player, including things such as:

- Request Smoke on nearest target (there is a delay on this)
- Request AWACS calls

- Call for reinforcements
- Setting up SAMs and new FARPs (when in the Mi8 or Huey).

2.6 F10 Map Markers

Several commands are available using the F10 marker system.

Ground unit controls, sorties searching / attacking in the marker location etc.

Further details are given in Section 4.

2.7 Weapon Systems

No limits are placed on the weapon systems available to players. The reasoning behind this is to allow players to use and learn whatever they want in this “playground”.

However, it is noted that advanced weapon systems will cut through the Red defences like a hot knife through butter, such as:

- JDAMs
- HARMs
- Apache Longbow radar

Do feel free to use whatever weapons you like, but bear this in mind if you want any sort of challenge.

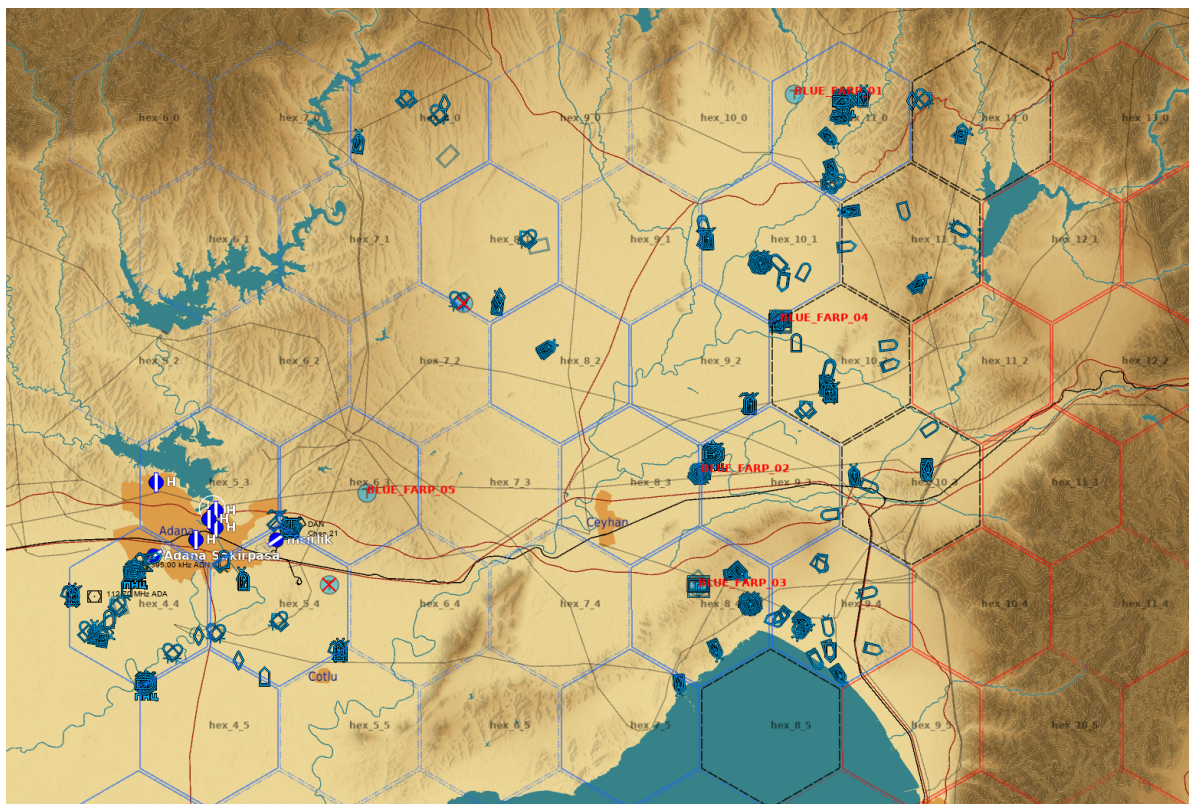
No splash damage script has been included, and it is noted that ED are currently modifying weapon damage in recent patches to DCS.

3 The Map

3.1 Introduction

The F10 map hexes are be updated periodically to give an overview. The following colour coding is used to signify the state of the ground war

Hex Colour	Line Type	Hex Status
Blue	Solid	Blue units in Hex
Blue	Dashed	Blue Units closer than Red units
Red	Solid	Red units in Hex
Red	Dashed	Red Units closer than Blue units
Black	Dashed	Both Red and Blue units in the hex or Both Red and Blue units in adjacent hexes
Grey	Filled Area	AI will not move units in these hexes. Usually sea or mountain hexes



Red and blue arrows will appear on the map to show ground force movements.

4 Supply

4.1 Income

Red and Blue receive supply points based on control of infrastructure:

- Airfields
- Power Plants
- Factories

Additionally, Blue and Red are limited on the number of ground units available at a given time. If the number of allowed Blue units is exceeded, then a “tax” is applied to the Blue Supply, and a fraction of this tax is given to Red.

Red is also limited on the number of ground units, however the script won’t exceed the allowable Red units, so no tax is required.

4.2 Spend: Blue

Players are able to spend supply using the radio menu, or via the F10 map. See section ### for details on how players can spend supply points.

The script will start spending supply points on reinforcements and sorties if the supply point start to become excessive. This will allow players to just enjoy flying without having to worry about the ground war and requesting CAP, SEAD missions etc.

Typical things the script will do is:

- If the unit cap has not been reached, then it may reinforce hexes with ground units where it considers Blue to be weak, particularly around the frontline and airfields.
- Set up BARCAP sorties
- Send SEAD, CAS, Strike missions

Although not yet implemented, it will also automatically send repair convoys to SAM sites that have been damaged by the enemy. Currently only the player can do that with the radio menu.

4.4 Spend: Red

Red will spend supply points to reinforce

3.3 AI: Sorties

3.4 AI: Ground Units

4.1: F10 Map Commands

The player can request actions using the F10 Map Markers. Simply enter the text (case sensitive) to the marker box, and the request will be ordered if there are sufficient supply points.

Although these cannot be commanded within the radio menu system, the cost for each item is listed in the radio menu.

These are split into two categories.

Aircraft Ops:

Marker Text	Action / Event
CAP	Request CAP support
CAS	Request CAS support
SEAD	Request SEAD to take out SAM unit
Helo	Request Attack Helo's to the Marker Hex

GroundOps:

Marker Text	Action / Event
SHORAD	A SHORAD team will spawn at the FARP and drive to the Marker location
Combat	A Combat team of light AFV's will spawn at the FARP and drive to the Marker location
Move	Will request the friendly combat units from the nearest hex to the marker to move to the hex that the marker is inside NOTE : 5 unit limit, or will skip to the next hex.
JTAC	A JTAC unit will spawn at the FARP and drive to the Marker location. JTACs will use Red smoke and lase on code 1688.
Relocate	The nearest JTAC will relocate to the Marker

Smoke	Green smoke at location of marker
-------	-----------------------------------

Combat teams are primarily Strikers and Bradley type units.

Blue SHORAD teams and Combat teams will also include a Vulcan/Gepard unit for AA point defence.

Ammo trucks are useful for reloading the SAM sites.

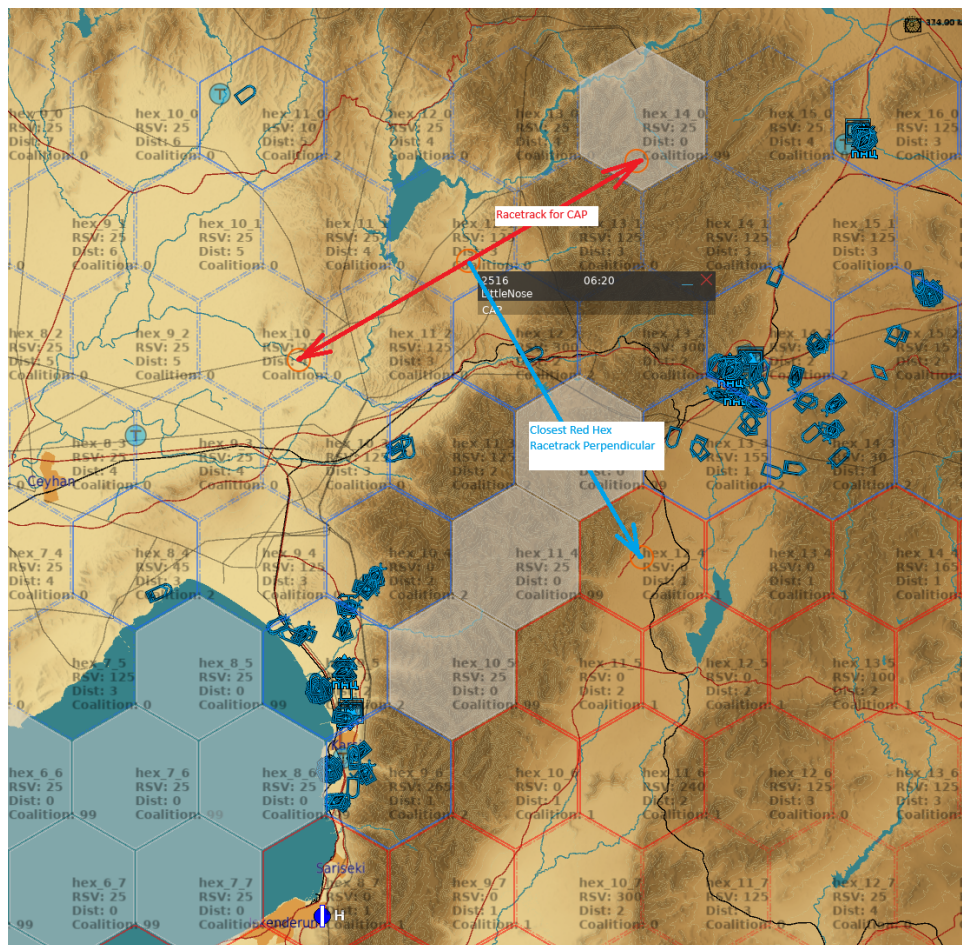
4.1.1 CAP

To request a CAP sortie, simply place a marker on the F10 map and enter “CAP” text.

A CAP flight will spawn at the home airfield and attempt to fly a racetrack.

The image below shows the racetrack details, and note that the racetrack:

- direction will be perpendicular to the closest enemy hex
- Length of the racetrack will reduce if the distance to the red hex is small
- Has additional markers that will temporarily appear on the F10 map showing:
 - closes red hex
 - racetrack start
 - racetrack end



4.1.2 CAS

A flight of 2 aircraft will be tasked with close air support within the hex that the marker was placed.

The sortie will continually hunt to find enemy ground units until:

- There are no more enemy ground units in the hex
- They run out of suitable munitions
- They are shot down

4.1.3 SEAD

A flight of 2 aircraft will be tasked to attack a surface to air ground units near the marker placed on the F10 map.

The target will be prioritised based on threat level and distance from marker. If there are no suitable targets, then the mission will be cancelled.

The sortie will continue until:

- The target is destroyed. Other targets may not be engaged.
- They run out of suitable munitions
- They are shot down

4.1.4 Helo

An attack helicopter will spawn at the closest FARP to the F10 marker location.

The attack helicopter will attack anything it detects en-route to the marker location and will search within the hex for suitable targets (similar to the CAS marker command).

4.1.5 SHORAD

4.1.6 Combat

4.1.7 Move

4.1.8 JTAC

4.1.9 Relocate

4.1.10 Smoke

4.2 Radio Commands

: Smoke Markers

Smoke is used in game to signify certain actions / events:

Action / Event	Smoke Colour
Player Requested from F10 Map Marker	Green
Player Requested Enemy	Orange
Automated JTAC Spotting	Red

2.5: Transport Helo Operations

The transport helios (Huey and Mi8) are able to provide additional operations through use of the Radio Menu options when landed.

The operations currently available are:

- Set up SAM sites
- Relocate FARP sites

The new installation will appear 50-100 m in front of the nose of the helicopter. Make sure the area is clear before requesting the installation.

The cost for SAM sites is reduced by 50% in comparison to requesting a SAM site on the F10 map.

Only transport helo's can relocate FARPs.

2.6: FARPs

FARPs provide a base from which helicopters can spawn.

Additionally, supply units will often spawn from FARPs if they are close to the area where the units will operate.

FARPs can be relocated by transport helicopters (Huey & Hip).

NOTE: DCS does not allow removal of inoperable FARPs from the F10 map.

- Thus red text will appear on the FARPs that are operational
- A red cross will appear over old FARP locations.

2.7: Supply Points

Supply is provided periodically (~8 minutes), and the amount of supply points is governed by certain infrastructure features on the map (factories, power plants, and airfields).

Supply points can be used to request support actions, and reinforcements.

Ensuring the Blue infrastructure survives, and destroying the Red infrastructure will expedite the victory.

The amount of supply points gained for each item of infrastructure are presented in the table below:

Infrastructure	Supply Points
Airfield	50
Factory	200
Power Plant	500

Depots will be added at a later date

2.8: Red “AI” Scripting

The red side will attempt to put up a defense from the Blue attacks:

- Reinforcing ground forces,
- Ground attacks on “weak” Blue hexes.
- Artillery and missile barrages,
- Running BARCAP missions,
- Interceptors scrambling where required,
- CAS and SEAD fixed wing missions,
- Attack Helo missions.

2.9: Persistence

The status of the mission is saved intermittently to file for reloading on a server restart.

The following aspects are saved:

- Ground unit locations
- Ground static locations
 - FARPs
 - Factories
 - Power Plants
- SAM site locations
- Supply Points

The following presents a not exhaustive list of what is not saved on mission restart:

- AI Aircraft, blue or red
- SAM site reloads.

2.10: Future Additions

2.10.1: Scripting

1. Depots
 - a. adds another dimension to supply
 - b. add additionally targets not on frontline
2. Player Profiles
3. Supply Convoys
 - a. Adds a movable target with tactical value
4. JTAC lasing on different freqs and 9-lines
5. Parked aircraft at airfields that if destroyed will cost supply points.
6. Aircraft packages
 - a. Player can generate a package
 - b. Package will escort the player and conduct TARCAP, SEAD etc as required.
7. Enemy intercept packages if you are detected by radar near enemy airfield / high value targets

2.10.2: Tech

1. SRS

3: Other Notes

Website

littlewars.infy.uk

Airfield

Parked static aircraft are considered value targets, and destruction of these will cause a reduction in the points gained by the owner during game tick.

The resource value of the airfield will be reduced by up to 50% by destroying parked aircraft.

Depot

All units of the depots need to be destroyed in order to reduce the resource gain during game tick. These will be rebuilt in time if there are available resources for script to utilise on this.

Factory/PowerPlant

Destruction of the power plant or factory will reduce the resources gained during game tick. These cannot be rebuilt in the time scale of the mission.

SAM site

Destruction of a SAM site will not affect resource gain during game tick. These will be rebuilt in time if there are available resources for script to utilise on this.

D6: GCI

An automatic GCI that can provide updates on enemy and friendly aircraft at set intervals.

Bearing, Range and Altitude will not be exact, but fall into brackets depending on distance from the AWACS or Ground EWR.

This is intended to give a picture to the player without overly specific information.

Detection Distance (nm)	Bearing Brackets	Range Brackets	Altitude Brackets	Grouping Brackets
0 - 50nm	+/- 5°	+/- 5nm	+/- 500 ft	singletons
50-150nm	+/- 10°	+/- 5nm	+/- 1250 ft	5nm & 2500 ft
150nm +	N, NW, SE, W etc	+/- 12.5nm	+/- 2500 ft	20nm & 5000 ft

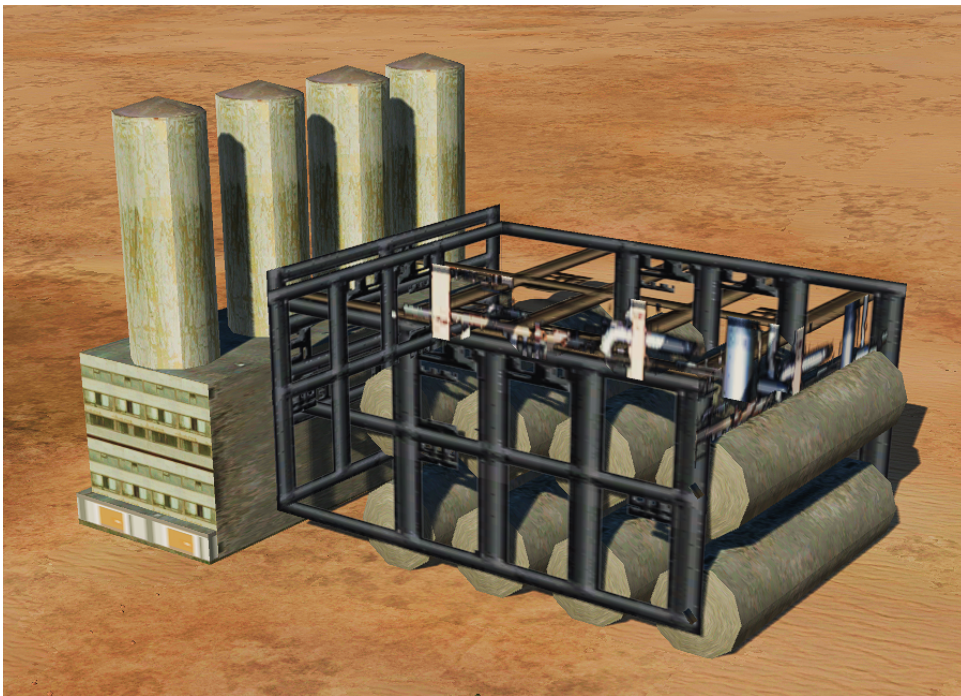
Example: “Group, South West, 175 miles, 15000 ft, beaming left”

More than 1 aircraft grouped together within 20miles and 5000 ft of each other, range between 162.5 and 187.5 nm, 12500-17500ft.

Visual Recognition

Statics

Factory



Units

Stuffs

