# Intro

What it is: Operational level simulator designed to grow and evaluate students’ understanding of joint warfare.

Creators: Originally created by five intrepid members of the class of 2019, first as a favor to the MSS department and then as a full Capstone. Later, they were joined by five daring members of the CompSci Dept. in order to produce the product that you see before you.

MSS

Juan Duque

Griffin Gluck

J.D. Kaltenbaugh

Bailey Little

Nic Marron

CompSci

Spencer Adolph

Jack Kulp

April Lewis

Adam Payne

Eric Yandura

# Getting Started

Sign In as Players

## **Commander Roles**

### **JFACC** Joint Forces Air Component Commander

* + Commander responsible for the control, purchase and coordination of use for all Air Assets in theater
  + Advises COCOM on air component matters and capabilities in joint operations

### **JFMCC** Joint Forces Maritime Component Commander

* + Commander responsible for the control, purchase and coordination of use for all Maritime Assets in theater
  + Advises COCOM on maritime component matters and capabilities in joint operations

### **JFLCC** Joint Forces Land Component Commander

* + Commander responsible for the control, purchase and coordination of use for all land Assets in theater
  + Advises COCOM on land component matters and capabilities in joint operations

### **JFSOCC** Joint Force Special Operations Component Commander

* + Commander responsible for the control, purchase and coordination of use for all Special Operations Assets in theater
  + Advises COCOM on special operations component matters and capabilities in joint operations

### **COCOM** Combatant Commander

* + Final approval authority for all operations in the AO.
  + Resolves all inter component disputes, especially concerning joint operations planning disagreements

## [Starting Scenario](https://docs.google.com/document/d/1KZ0pyciQVFi50GL4ccPDOss0jcI__FMJU8tQK5hDgRo/edit) -Link to starting scenario document

# How to Play

## Execute Phases

### News Alert:

This provides information on in game events. News Alerts may have large, little, or no impact on in game activities for either side. Each alert must be acknowledged by the COCOM. COCOM clicks to respond to the news alert.

### Buy Units/ Capabilities:

Buying units for all component commanders is controlled by COCOM and he/she has the choice of taking input from the component commanders on what to purchase. Capabilities are bought and controlled by the COCOM. To buy units click on the shop to bring the shop menu up. Both units and capabilities will be shown to click in order to purchase. Once selected the units will move into the shopping cart for units and capabilities. If you want to undo a purchase, simply select the unit from the shopping cart and it will disappear. If you would like to start over, you are able to clear the shopping cart completely and begin purchasing again. There is a points limitation on how many units are able for purchase, and you are not allowed to go in debt to purchase units. Once satisfied with the units you would like to purchase, click on confirm purchase and once this happens your points will be subtracted from your total.

### Combat Planning:

Planning to move or to use capabilities is controlled by the component commanders. For how to move see Movement. Click on inventory, select a capability and the hex which you would like to use it on. Be aware that some capabilities are going to happen immediately and other capabilities will occur during the execute round. One round consists of planning, execution, any battles that occur and any refueling that takes place.

### Execute:

During this portion of the round the player will have one of two windows pop up. A battle zone pop up or a refueling pop up will allow the player to choose which pieces attack with. During this portion of the round players will only be prompted to select pieces during a battle if a battle happens due to engagement with the enemy. Battles are over when the opposing side has no more forces to fight with. During refueling the players are able to select which tanker they would like to refuel other aircraft. (Refuleing ends?)

### Place Units:

Troops: Each component commander places all of their newly bought troops on capital island territories. Click once on the piece and then click once on the hex that the piece will now occupy. Please note, maritime units must be placed in sea hexes surrounding the capital island.

Radars: Only unit that can be placed on any hex of any island that you currently control. Radars are placed by the JFACC.

## Movement

Click on the hex that has the unit you wish to move. Now click on the piece in the bottom left hand corner window where it is shown. Now click on the highlighted hexes around your unit to plan the path your unit will take. Repeat this process for all pieces you wish to move.

## Boarding

This occurs when the Sea transport/C-130/Air Transport as well as the piece that will be placed inside, are both in the same hex. The piece that will be transporting the other unit will need to be “opened” for this function to happen. Click the transportation piece and click open on the box at the bottom left.

## Fuel

Both movement and game rounds depletes fuel by one. A game round with no movement uses one fuel to simulate loitering. Movement also costs one fuel to add to the fuel consumption because moving has a greater consumption rate that just loitering in a hex.

## Directions

## Restrictions Due to Combat

## Purchasing

## Capturing Land

Land is capturable only when land assets of only one team are present in the land space. Neither air or sea are able

## Bombardment (Destroyer)

This can only be used with a destroyer by dragging the piece onto land as if it were moving onto land. This ability can only be used if the destroyer is on a coastal hex, and upon its use it will cease destroyer movement once bombardment is complete.

# Order of Play

## Phases

### News Alert

### Buy Units/hybrid

### Combat

#### Planning

* 1. *Execute*

#### Battles

#### Containers

#### Refueling

### Place Troops

# Units

## Assets

These encompass conventional units from all four functional components of the U.S. military. Each functional component is controlled by its respective commander(see commander roles for more details) and together they are under the command of the COCOM who is responsible for executing the joint fight.

### Air Assets

These consist of air to air, air to ground, and air ISR capable units controlled by the JFACC. These units can go over land and water and are limited by both range and fuel consumption which can be augmented by in air refueling and friendly air bases. Air assets CANNOT capture land by itself.

#### Bomber Squadron

* + Description: Long range attack unit, minimal defensive capabilities
  + Cost: 15
  + Fuel: 15
  + Movement: 6
  + Capabilities/Rules: Air refuelable from tanker or airfields

#### Stealth Bomber Squadron

* + Description: Low radar cross section, ranged attack unit, minimal defensive capabilities
  + Cost: 21
  + Fuel: 12
  + Movement: 8
  + Capabilities/Rules: Air refuelable from tanker or airfields

#### Stealth Fighter Squadron

* + Description: Low radar cross section, air dominance fighter
  + Cost: 18
  + Fuel: 8
  + Movement: 12
  + Capabilities/Rules: Air refuelable by tanker, airfield, or carrier

#### Air Refueling Squadron

* + Description: Air refueler, no defensive capabilities
  + Cost: 11
  + Fuel: 22
  + Movement: 6
  + Capabilities/Rules: Refuels all air assets (not including helicopters) using the refuel menu.

#### Tactical Airlift Squadron

* + Description: Troop transport, long range, no defensive capabilities
  + Cost: 12
  + Fuel: 17
  + Movement: 7
  + Capabilities/Rules: Air Refuelable by Tanker or Air Field
    - Can Transport one Marine infantry platoon OR one Army infantry platoon. Able to open up the cargo bay, have tr0ops enter and exit on airfields only.

#### Airborne ISR

* + Description: Aircraft reconnaissance platform, no attack or defense values
  + Cost: 8
  + Fuel: 13
  + Movement: 7
  + Capabilities/Rules: Air refuelable by tanker or Air Field

#### Radar Station

* + - Description: Fixed ground station capable of detecting land and air units.
    - Cost: 20
    - Movement: 0
    - Capabilities/Rules: Must be placed in an area where the player controls the command post as well as the hex it will be placed in. Not able to be placed which contains enemy units, regardless of island ownership. Once placed, cannot be relocated or captured. Can be destroyed by enemy units. No Combat capability. Increases visibility of battlespace.

### Land Assets

These consist of all units that walk, roll, or roter across the land. These units are responsible for capturing and holding all territories as well as defending local infrastructures such as air bases, missile sites, and radar stations. 7

#### Army Infantry Company

* + Description: Basic ground unit
  + Cost: 3
  + Movement: 1
  + Capabilities/Rules: When supported by artillery (when friendly artillery participating in the same attack) attack value +1 against other land assets with a max value of 12.

#### Marine Infantry Company

* + Description: Less basic ground unit
  + Cost: 4
  + Movement: 1
  + Capabilities/Rules: When supported by attack helicopter (when friendly attack helicopter participating in the same attack) attack value +1 against other land assets with a max value of 12

#### Light Infantry Vehicle Convoy

* + Description: Light armor attack vehicles
  + Cost: 7
  + Movement: 2
  + Capabilities/Rules: none

#### Tank Company

* + Description: Armored attack vehicles
  + Cost: 8
  + Movement: 1
  + Capabilities/Rules: none

#### Artillery Battery

* + Description: Mobile indirect fire support vehicles
  + Cost: 8
  + Movement: 1
  + Capabilities/Rules: Supports Army infantry units (see Army Infantry unit)

#### SAM Site

* + Description: Anti access area denial for airborne units
  + Cost: 9
  + Movement: 1
  + Capabilities/Rules: SAM Range based on the visibility matrix. When A/C move through the range they are attacked until the A/C are destroyed or out of the SAM range.

#### Attack Helicopter

* + Description: Heavily armored close air support
  + Cost: 11
  + Fuel: 3
  + Movement: 2
  + Capabilities/Rules: Supports Marine infantry units (see Marine infantry units); capable of flying over land or sea; auto refuels when over land, not refuelable by the tanker, not able to capture land.Able to take off from a A/C Carrier, refueled by carrier.. Refuelable on a transport, however it cannot take off from a transport. Enter and exit a transport from land only.

### Maritime Assets

These consist of all units that float on water or submerge under it. These units are responsible for transporting land units, supporting land or air units, or facilitating floating landing strips for aircraft.

* Destroyer
  + Description: Fast Maneuverable Long endurance warship intended to escort larger vessels in a fleet
  + Cost: 18
  + Movement: 2
  + Capabilities/Rules: Only vessel that is able to detect submarine units, only unit capable of land bombardment (only able to bombard land units which are on coastal hexes)(according to attack matrix and is the bombardment killing both sides if land assets of both sides present? Not able to move after bombardment)
* Aircraft Carrier
  + Description: a warship that serves as a seagoing airbase, equipped with a full-length flight deck
  + Cost: 24
  + Movement: 2
  + Capabilities/Rules: seafaring air base which is only able to harbor C130s and stealth fighters. (max capacity: 3 fighters, or 2 fighters and 1 C130, or 1 fighter and 2 C130s, but never 3 C130s, 2 Helicopter at any given time). Any asset that lands on a carrier is automatically refueled.
* Sub
  + Description: a submarine specifically designed for the purpose of attacking and sinking other submines or surface combatants
  + Cost: 16
  + Movement: 2
  + Capabilities/Rules: only visible via destroyers and other submarines, undetectable by other units and therefore combat is optional with units which have yet to detect it - can choose to pass by
* Transport (Sea)
  + Description: a large, medium-speed roll-on/roll-off (LSMR) cargo ship specifically built to move military cargo
  + Cost: 10
  + Movement: 2
  + Capabilities/Rules: generally defenseless cargo ship capable of carrying a maximum of 3 infantry, or 2 infantry and 1 vehicle unit (tank, convoy, artillery, SAM, or helicopter)

### SOF Assets

These units are composed of 12 man teams composed of highly trained operators as well as their supporting aircraft. These units can be air-dropped over land via the C-130 and are used for sabotage, airfield seizure, and are much harder to detect than typical infantry units.

* MC-12
  + Description: twin engine ISR platform capable of detecting the majority of ground units
  + Cost: 11
  + Movement: 4
  + Fuel: 12
  + Capabilities/Rules: Refuelable by tanker, and airfield, Non-combat unit
* C-130
  + Description: Tactical airlift unit
  + Cost: 12
  + Movement: 7
  + Fuel: 14
  + Capabilities/Rules: Non-combat cargo unit (cargo: 1 SOF team only), only aircraft that can perform airdrop (deploy units without landing on airfield). Refuelable by tanker and airfield.
* SOF Team
  + Description: Military units trained to conduct special operations (12 man team)
  + Cost: 7
  + Movement: 1
  + Capabilities/Rules: Difficult to detect unit because of size. Specializes in SAM site destruction. Not intended for direct action, capable of seizing enemy airfields and destroying aircraft on said airfield. When seizing an enemy airfield: if there are no units on the airfield it is immediately captured and can be used by capturing team only, if there are only aircraft occupying airfield hex they are immediately destroyed by SOF team sabotage and the airfield is subsequently captured, if there are any ground units in airfield hex they detect SOF and sound alarm to all units SOF team must engage all ground and air units in combat in order to capture airfield.

### Specialty Groups

Functional military units are regularly grouped into specialized units based on their mission. In reality, the combined capability of these units is greater than the sum of its parts. The following units will receive an additional +1 to their combat value if they participate in combat together:

* Armored Brigade Combat Team (Armored BCT): Two infantry units, one tank battalion, one convoy, one artillery battery.
* Marine Expeditionary Unit (MEU): Three marine infantry units, one helicopter squadron, one artillery battery.
* Carrier Strike Group (CSG): One Aircraft Carrier, One fighter squadron, two destroyers, one submarine

Note: Additional units in the same zone that are not included in the grouping do not receive the combat bonus. Example: If there is the units that make up a CSG in a hex and an additional submarine is also located in the hex, the additional submarine will not receive the increase in combat value.

## Capabilities

## These options are non conventional and are used across the domains. The capabilities give the COCOM options to affect the battlespace across the PMESII spectrum.

### Cyber

* ATC Scramble
  + Description: This option makes use of offensive cyber capabilities to deny service to the airfield by shutting down the traffic control tower through electronic means.No Refueling, or landing options when this is active.
  + Cost: 20
  + Duration: 1 Full Turn (3 rounds)
* Cyber Dominance
  + Description: The nation’s cyber R&D has created a defensive shield capability that prevents enemy from using any offensive cyber effects.
  + Cost: 40
  + Duration: 3 Full Turns (9 rounds)
* Missile Launch Disruption
  + Description: Offensive cyber effect that impedes the successful launch from a selected silo for a short duration. (land based sea missile positions)
  + Cost: 25
  + Duration: 1 Full Turn (3 rounds)
* Communications Interruption
  + Description: All transmitted communications within enemy network are rendered useless for the duration of its use. Functional commander is unable to communicate with their troops and as a result troops in a 2 hex radius are unable to move for the duration of the capability.
  + Cost: 30
  + Duration: 1 Full Turn (3 rounds)

### Space

* Remote Sensing
  + Description: This capability allows your team to monitor a certain area (4 hex radius) with a dedicated ISR satellite. Satellites can detect all units with the exception of submarines and SOF teams.
  + Cost: 60
  + Duration: 3 full turns (9 rounds)
* Rods from God
  + Description: This capability utilizes high speed Tungsten rods from orbit to kinetically destroy all units contained in a single hex.
  + Cost: 35
  + Duration: Instant
* Anti Satellite Missiles
  + Description: Temporary anti-satellite capability that will prevent the enemy team from using “Remote Sensing” capability entirely or will immediately stop effects if the enemy is already using it. If the missiles are not used within two turns they go inactive and must be purchased again to continue scanning for enemy satellites.
  + Cost: 35
  + Duration: 2 turns(6 Rounds)

### Nuclear

* Golden Eye
  + Description: Satellite based EMP strike that affects all units in a selected area ( radius 2 hex). In selected area: all air units are instantly destroyed and all other units are immobilized for 4 full turns.
  + Cost: 90
  + Duration: For aircraft: instant, for all other units: 4 full turns (12 rounds)
* Nuclear Strike
  + Description: Tactical ICBM strike, destroys all units within 5 hex radius. Nuclear fallout in selected hexes precludes land, sea, or air passage for remainder of campaign. Note: nuclear strike not targetable on or within 2 hexes of capital islands. Also once a team has utilized the nuclear option they can no longer participate in humanitarian efforts.
  + Cost: 190
  + Duration: Unit destruction immediate, nuclear fallout lasts for the entire game length.

### Humanitarian

* Disaster relief that must be initiated by news alert. News alert will describe disaster and indicate what level investment will provide relief. Investment will garner returns for supporting team after 3 turns. (9 rounds)
  + Lvl 1 disaster requires 6 reinforcement point investment and returns 15 points three turns later.
  + Lvl 2 disaster requires 10 reinforcement point investment and returns 22 points three turns later.
  + Lvl 3 disaster requires 16 reinforcement point investment and returns 35 points three turns later.

### Unconventional

* Biological Weapons
  + Description: Concentrated bio/chemical weapon that will destroy all units in selected hex (does not include aircraft (that are taken off)). Note tile remains toxic for duration of effect, any ground units that enter hex within duration will be immediately destroyed regardless of team. Note: Humanitarian assistance is restricted for the duration of this effect.
  + Cost: 25
  + Duration: 3 full turns (9 rounds)
* Sea Mines
  + Description: Creates seabased minefield that will destroy the first sea unit to pass through selected hex. If multiple attempt to pass at once random chance will dictate which sea unit hits the mines. Note: sea mines can only be deployed by sea transports, once offloaded into the ocean sea mines are live and will destroy the next unit to enter the hex friend or foe.
  + Cost: 20
  + Duration: Remains in selected hex until function is carried out
* Drone Swarms
  + Description: Creates air based minefield that will destroy the first air unit to pass through selected hex. If multiple attempt to pass at once random chance will dictate which air unit hits the mines. Note: drone swarm can only be deployed by C-130, once offloaded into the air, the swarm is live and will destroy the next unit enter the hex friend or foe.
  + Cost: 20
  + Duration: 4 full turns (12 rounds)

### Propaganda

* Insurgency
  + Description: Clever social media propaganda has caused an uprising in a single hex region. In the violence, the enemy team has a 1/3 chance of losing each unit in selected hex in an attempt to maintain control of that hex.
  + Cost: 20
  + Duration: Instant
* Raise Morale
  + Description: COCOM selects a functional commander to invest money into that component’s deployment MWR programs. Each unit in that component will receive +1 moves for that turn. It can be used as soon as it’s give from the COCOM.
  + Cost: 50
  + Duration: 1 Full turn (3 rounds)

# Victory Conditions

* Capture all command posts on enemy islands. This removes all enemy forces from the area, preventing them from maintaining their standing as a regional power and preventing the spread of that country’s ideals.