

Warning: To Owners of Projection Televisions

Still pictures or images may cause permanent picture-tube damage or mark the phosphor of the cathode ray tube. Avoid repeated or extended use of video games on large-screen projection televisions.

Epilepsy Warning

Please read before using this game or allowing your children to use it.

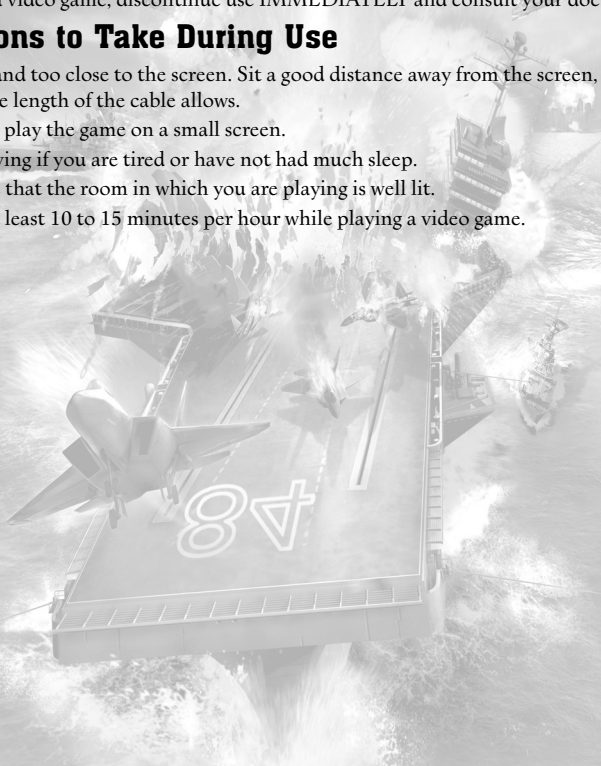
Some people are susceptible to epileptic seizures or loss of consciousness when exposed to certain flashing lights or light patterns in everyday life.

Such people may have a seizure while watching television images or playing certain video games. This may happen even if the person has no medical history of epilepsy or has never had any epileptic seizures.

If you or anyone in your family has ever had symptoms related to epilepsy (seizures or loss of consciousness) when exposed to flashing lights, consult your doctor prior to playing. We advise that parents should monitor the use of video games by their children. If you or your child experience any of the following symptoms: dizziness, blurred vision, eye or muscle twitches, loss of consciousness, disorientation, any involuntary movement or convulsion, while playing a video game, discontinue use IMMEDIATELY and consult your doctor.

Precautions to Take During Use

- Do not stand too close to the screen. Sit a good distance away from the screen, as far away as the length of the cable allows.
- Preferably play the game on a small screen.
- Avoid playing if you are tired or have not had much sleep.
- Make sure that the room in which you are playing is well lit.
- Rest for at least 10 to 15 minutes per hour while playing a video game.



Security Council Sub-Committee (Resolution 1521) on Global Liberation Army

Report to Security Council: Situational Report (SIT REP) on GLA Activities

Distribution: Classified

Location: Aral, Kazakhstan

Although China succeeded in driving the GLA from its western border, it failed to corral the organization, which has spread across Central Asia into Kazakhstan. The GLA's series of victories has rallied sympathizers, allies, and soldiers among the rebel militias of Central Asia that have ideological or political grievances against China and the USA. As predicted by this sub-committee, the failure to stop the GLA in Asia has made it a force in Central Asia and, with its capture of the Baikonur Cosmodrome facility, a ballistic threat to Europe.

The USA has mobilized forces to root out the GLA from Baikonur. Whilst American Generals have called the upcoming action at the Cosmodrome a "mop-up operation," accumulated intelligence suggests that the USA is making a force commitment that has not been seen since the Iraq War a generation ago. Information emerging from the Baikonur region is sketchy and unreliable at this time. The GLA may be garrisoned among an arsenal of ballistic weapons at the facility. The garrisoned forces will not hesitate to deploy such weapons, particularly if there is no option for escape. The USA must act quickly and decisively to avoid devastating environmental effects similar to those resulting from the Sudan Crisis earlier this century.

In Iran, Egypt and Syria, informants are reporting that a new, more virulent form of anthrax has become available on the black market. Codenamed Anthrax Gamma, this strain purportedly doubles the lethality of previous forms of the bacterial agent. While little has been confirmed, a great deal of GLA mobile phone chatter and intercepted email seems to be swirling around an individual nicknamed "Dr. Thrax."

A research immunologist by training, Dr. Thrax has been selling biological agents to the GLA for some time. He is believed to travel with a phalanx of GLA Elite Guards, and his profile in the organization continues to rise. His whereabouts are unknown.

Overhead reconnaissance has tracked numerous GLA units and personnel melting into mountainous terrain north and west of the Baikonur facility. Part of the GLA has escaped to regroup and the remaining forces at Baikonur are refusing to negotiate. If Dr. Thrax has finished development of Anthrax Gamma, the revitalized GLA poses an even greater threat to the nations of Europe.

The sub-committee recommends that the Security Council attempt to gain resolution on the situation at Baikonur and to penetrate the GLA leadership through any available channels.

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Introduction

Zero Hour has arrived. *Command & Conquer™ Generals Zero Hour Expansion Pack* launches new units, armies and campaigns onto the battlefield of the top-selling RTS game. Although the GLA has been thwarted in its initial campaign, it returns to wage war with a battery of new weapons, tactics and goals against the civilized world of the not-so-distant future. Lead your army of GLA, USA, or Chinese forces through a series of even more challenging missions. Surprise the enemy with new units, structures and super weapons to gain the upper hand. In the all-new Generals Challenge, you can do battle against any or all of nine specialized armies, each led by a shrewd General, expert in a particular type of tactics. Or, you can assume the role of one of these Generals in online play, which includes many new multiplayer maps and other enhancements to make the *Command & Conquer* experience better and faster than ever before.

Features

- **Fifteen new missions in three campaigns.** All new maps are integrated into three compelling storylines, each of which reshapes the world.
- **New multiplayer maps.** Test your online *Command & Conquer* skills in new scenarios for two to eight players.
- **Generals Challenge.** Match your personal strategies against nine AI Generals with unique personalities, tactics and taunts.
- **The latest weapons in next-generation warfare.** USA, China and the Global Liberation Army bring improved arsenals to the battlefield.
- **New missions taken from tomorrow's headlines.** Destroy the USA fleet in the Mediterranean, root out a splinter cell in Cairo, infiltrate a USA intelligence building and send in special operatives to capture weapons of mass destruction.
- **More tools to conquer the globe.** Energy systems and super weapons rely on microwave, laser and satellite technology.
- **The unparalleled Generals engine.** More visual enhancements to the game engine deliver an even better game.
- For more information about this and other titles, check out EA GAMES™ on the web at www.eagames.com

Note: Requires *Command & Conquer™ Generals* to play.

Note: See the enclosed Install Guide for Technical Support information.

New Controls

Command & Conquer Generals Zero Hour Expansion Pack puts new controls at your fingertips to improve your speed in combat situations.

Note: Default options are listed in **bold type**.

New Mouse Commands

Action	Mouse
Selected units attack-move to destination and then guard the area (optional)	Select units and double-click destination

- **Special note on Particle Cannons:** To make the beam deployed from the Particle Cannon move faster across the terrain, double-click the left mouse button

Alternate Mouse Controls (optional)

You can configure a double-click of the left mouse button to make your selected units attack-move to a targeted location. When you double-click a location, your selected units move towards that location, attacking enemy units along the way and guard the location when they arrive.

- To use the double-click attack-move control, click the checkbox next to Double Click Attack Move in the Options screen. Then, click ACCEPT.

Note: You can change to alternate mouse controls, too.

- To change the mouse controls to use the right button as the Action button, click the checkbox next to Alternate Mouse Setup in the Options screen. Then, click ACCEPT.

Function	Mouse
Move cursor	Move pointer
Select unit or structure	Click
Select all units and structures in an area	Click and drag
Select all units or structures of the same type.	Double-click
Action button: select unit, move unit to selected area, or attack unit in the selected area	Click right button
Selected units attack-move to destination and then guard the area (optional)	Select units and double right-click destination

New Hotkeys

Action	Hotkey
Scroll the screen	Arrow keys
Select all of your units on the screen	Q (once)
Select all of your units on the map	Q (twice)
Select all of your air combat units on screen	W (once)
Select all of your air combat units on the map	W (twice)
To build a GLA Worker at the Command Centre	K

Getting Started

When installed, *Command and Conquer Generals Zero Hour Expansion Pack* is available through the interface of your previously installed *Command and Conquer Generals* game.

Note: For information on installing *Command and Conquer Generals Zero Hour Expansion Pack*, please see the enclosed Install Guide.

Playing Zero Hour

New for *Command and Conquer Generals Zero Hour*, Generals Challenge presents a unique set of armies with specialized tactics and weapons for you to grapple with in single-player combat. To begin a Generals Challenge game, click SOLO PLAY in the Main menu. Then, click CHALLENGE. For more information, see *Generals Challenge* on p. 16.

Three new campaigns offer challenging scenarios and environments in which to combat the USA, China and GLA armies.

Note: For more information, see *Playing the New Campaigns* below.

New multiplayer maps are available through the original *Command and Conquer Generals* interface.

- To play one of the new multiplayer maps, click SELECT MAP in the Multiplayer Game Options screen. For more information, see *Create a Game* in your *Command and Conquer Generals* manual.

New units, structures and upgrades have been added to the standard armies for each side.

- For more information on new elements for the USA side, see *New USA Elements* on p. 10.
- For more information on new elements for the China side, see *New China Elements* on p. 12.
- For more information on new elements for the GLA side, see *New GLA Elements* on p. 13.

Playing the New Campaigns

Command and Conquer Generals Zero Hour Expansion Pack includes three new campaigns, one each for the USA, GLA and China. While you can play the campaigns in any order, it is recommended that you play them in this order: USA, GLA and China.

To begin a new campaign:

1. Click SOLO PLAY in the Main menu.
2. Click the side to play.
3. Select a level of difficulty to play. The campaign introductory movie begins.

USA Campaign Overview

The USA has driven the GLA into remote territories in Western Asia but has not been able to claim a decisive victory. Whilst friends and family clamour for the return of soldiers to their homeland, USA Generals are intent on finishing the job. Scattered intelligence suggests that the GLA has acquired chemical and biological weapons of mass destruction, but the information is not reliable. Of greater certainty is the new leadership of the GLA, which, experts believe, will lead the terrorist organization on a fresh wave of attacks against the American military. The USA must act quickly and decisively before the initiative and the will to fight have been lost.

GLA Campaign Overview

USA Generals have been stymied by the GLA's continued efforts to harass and strike targets of opportunity. Analysts estimate that the GLA is recruiting two new divisions and is stockpiling resources, possibly including new weapons of mass destruction. With each successful terror strike, the GLA gains new admirers, more press and momentum to deliver a finishing blow to its enemies.

China Campaign Overview

The USA side has suffered greatly at the expense of the GLA and Chinese Generals are aware of it. Whilst China experienced significant losses in driving the GLA from their western territories, the border is now secure. As the GLA has left pockmarks on USA military might, China has so far stayed out of the recent hostilities. However, any further sign of American weakness may become an opportunity to roll the tanks of the Chinese Generals.

Gaining Ranks

In *Command & Conquer Generals*, you gain ranks for destroying enemy structures and units. Earning new ranks also rewards you with Generals Points, which can be spent on new Generals Powers.

- **Graduate to Ranks 2-4:** One Generals Point for each rank.
- **Graduate to Rank 5:** Three Generals Points.

You can earn up to seven Generals Points on any mission.




Battle Honours

Earn victory on the battlefield to gain *Command & Conquer Generals* Battle honours in Skirmish and Multiplayer conquests.

Note: To earn a victory in Skirmish or Multiplayer match play, you must destroy all enemy units and buildings. Defences and Demo Traps are not considered buildings.

- Battle honours for Solo Play can be viewed in the Skirmish Game Setup screen.

Campaign Honours

Icon	Honour	Description
	USA Campaign Honour	USA Campaign Honour Defeat the USA campaign. Achieve victory on the highest difficulty level to earn the Gold medal.
	GLA Campaign Honour	GLA Campaign Honour Defeat the GLA campaign. Achieve victory on the highest difficulty level to earn the Gold medal.
	China Campaign Honour	China Campaign Honour Defeat the China campaign. Achieve victory on the highest difficulty level to earn the Gold medal.
	Challenge Campaign Honour	Complete the Generals Challenge to earn this honour. Achieve victory on the highest difficulty level to earn the Gold medal. For more information, see <i>Generals Challenge</i> on p. 16.

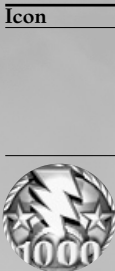

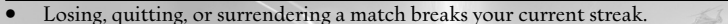






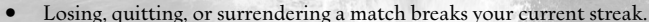
Skirmish Honours

The following Skirmish honours are awarded based on your total statistics, which are accumulated in each game.

Icon	Honour	Description
	Endurance Honour	Conquer every Skirmish map to earn this honour.
<ul style="list-style-type: none">The lowest difficulty setting that you set for any map determines the medal that you earn for Endurance.		
	Streak Honour	Sustain a winning streak of 3, 10, 25, 100, 500, or 1000 victories in a row to earn Streak Honours.
<ul style="list-style-type: none">Losing, quitting, or surrendering a match breaks your current streak.		
	Blitz Honour	Win a match in less than 10 minutes.
	Domination Honour	Earn recognition for winning 100, 500, 1000, or 10,000 games over your <i>Command & Conquer Generals</i> career.
	Ultimate Honour	Conquer every Skirmish map against the maximum number of enemies on Hard difficulty level to earn the Ultimate Honour.
	Air Wing Honour	Build 20 or more aircraft against a computer-controlled opponent.
	Battletank Honour	Build 50 or more tanks against a computer-controlled opponent.
	Apocalypse Honour	Build the Particle Cannon, Nuclear Missile and SCUD Storm superweapons to earn this honour.




Multiplayer Honours

Note: To earn Multiplayer honours, you must tabulate statistics for each game. Multiplayer statistics are tabulated separately from Skirmish statistics. For more information, see *Changes to Creating an Online Game* on p. 27.


Icon	Honour	Description
	Fair Play Honour	To earn a Fair Play Honour, you must have won, lost, surrendered, or exited using normal game channels at a 90% rate for at least 10 total games.
	Streak Honour	Sustain a winning streak in online games of 3, 10, 25, 100, 500, or 1000 victories in a row to earn a Streak Honour.
		
	Domination Honour	Earn recognition for winning 100, 500, 1000, or 10,000 games over your online career.
	Air Wing Honour	Build 20 or more aircraft against a human opponent.
	Battletank Honour	Build 50 or more tanks against a human opponent.
	Apocalypse Honour	Build the Particle Cannon, Nuclear Missile, and SCUD Storm superweapons against human players to earn this honour.
	Blitz Honour	Win a match in less than 10 minutes against a human opponent.
	Streak Honour	Sustain a winning streak of 3, 10, 25, 100, 500, or 1000 victories in a row against human opponents.
		

New USA Elements

New USA Units





Icon	Name	Description
	Sentry Drone	This stealthed vehicle provides a forward-looking eye that doesn't need much coordination or supervision. When the drone is upgraded, a nose-mounted 20mm machine gun is automatically deployed against infantry and small vehicles.
	Microwave Tank	The Microwave Tank can disable the electronics in structures via microwave frequencies. Defensively, a microwave field harms infantry.
	Avenger	A mobile platform, the Avenger can paint airborne and ground targets with its Point Defence Laser. When targets are painted, other in the vicinity can fire faster and with better success at them. The Avenger can also down enemy aircraft.

New USA Structures



Icon	Name	Description
	Firebase	Packing a 155mm cannon, this small firing base can deliver a tremendous amount of ordnance a long way. If inbound hostiles manage to avoid the barrage, they may be weak enough to be dispatched by the four infantrymen garrisoned inside.

New USA Upgrades

Icon	Name	Description
	Countermeasures	To protect its considerable investment in airborne weapons systems, the USA has developed effective countermeasures to heat- and radar-seeking projectiles. All USA aircraft can upgrade to Countermeasures. Available at the Airfield.
	Hellfire Missile Drone	This upgrade can equip most USA units with a drone that fires Hellfire missiles.




Icon	Name	Description
	Chemical Suit	In the face of likely Toxin attacks, USA infantry and other personnel should be equipped with the Chemical Suit upgrade. While a Chemical Suit is not impervious to Toxins, it can withstand them until the wearer can clear the area. Available at Strategy Centre.
	Supply Lines	A modern army can be stopped in its tracks if supply lines are hindered or cut. Adding the Supply Lines upgrade increases the productivity of Chinooks, which keeps the units rolling forward. Available at Strategy Centre.
	Bunker Busters	Six feet of reinforced concrete buried twenty feet below ground cannot withstand a well-placed Bunker Buster. When it detonates, the explosive upgrade kills garrisoned infantry or forces them to exit the building or tunnel network. Available at the Airfield.
	MOAB	An upgrade for a Fuel Air Bomb, the Massive Ordnance Air Burst is a big bomb designed for low-altitude detonation. The nine tons of explosive on-board can topple tanks several hundred yards from ground zero. Available from Strategy Centre once Fuel Bomb General Power is selected.

New USA Generals Powers


Icon	Name	Description
	Leaflet Drop	The sharpest blow strikes an enemy's will to fight. A Leaflet Drop in an enemy's camp saps morale and reduces the will of his units to resist. Affected units become temporarily immobile.
	Spectre Gunship	The Spectre Gunship can lay waste to anything that has the misfortune of being in its sights. This slow-flying platform flies in a tight circle, dispensing 50-calibre shells from the multiple machine guns mounted down its sides. It is equipped with a manual override for targeting during flight.

New China Elements



New China Units



Icon	Name	Description
	Listening Outpost	China has developed advanced surveillance technologies that can be deployed in low-cost units for the front line. The Listening Outpost detect the movements of units across a wide radius, including stealthed units and is fortified with Tank Hunter units.
	Helix	This large helicopter can transport infantry and some vehicles across any terrain. A flexible platform, the Helix can be upgraded with the Propaganda Tower, Gattling Gun, or Bunker. Napalm Bombs can also be added for additional firepower.
	ECM Tank	This vehicle-based suite of electronic countermeasures protects advancing Chinese columns. A multi-frequency jammer effectively disrupts guided missile and rocket attacks, which can cause them to miss their targets. Its directed beam can also disable the electronics of vehicle units.

New China Structures



Icon	Name	Description
	Internet Centre	Stronger than the sum of its parts, the Internet Centre can hold up to eight Hackers, who perform better when working together. The Internet Centre can be upgraded with Satellite Hack 1 and Satellite Hack 2.

New China Upgrades

Icon	Name	Description
	Neutron Mines	Neutron Mines are lethal weapons against personnel that may be attempting to commandeer a protected structure. Neutron Mines can also take out the drivers of vehicles. Driverless vehicles become neutral and can be commandeered.
	Satellite Hack 1	Upgraded at the Internet Centre, the Satellite Hack 1 reveals all territory around each Command Centre on the map.

Icon	Name	Description
	Satellite Hack 2	From the Internet Centre, the Satellite Hack 2 can periodically expose all opposing satellite frequencies, revealing all that the enemy can see for a short period of time.
	Neutron Shells	Long rumoured to be in the Chinese arsenal, the Neutron Shell destroys enemy personnel, leaving structures and units untouched. Neutron Shells are launched from the Nuke Cannon.




New China Generals Powers

Icon	Name	Description
	Carpet Bomb	A high altitude aerial bombardment can rattle the cage of the enemy and wipe out columns well before they arrive. The Carpet Bomber can release volleys upon enemy installations.
	Frenzy	This Generals Power drives friendly units into a frenzy. Firepower and armour of these units are temporarily increased, which in a single moment can turn the tide of the battle.


New GLA Elements

Special note on the Angry Mob: Angry Mobs cannot be garrisoned, transported, or moved through the Tunnel Networks. GPS Scramble does not work on them.





New GLA Units

Icon	Name	Description
	Saboteur	This infantry unit receives special training in stealth and sabotage. Capable of climbing cliffs, the Saboteur can infiltrate enemy bases, sneak into buildings and power them down. If a Saboteur enters an enemy Command Centre, all Generals Powers are reset.
	Combat Cycle	Manned by infantry personnel, the Combat Cycle is a low-cost, highly mobile fighting unit. Excellent for reconnaissance operations, the Combat Cycle acquires the abilities of any GLA infantry unit that drives it.
	Battle Bus	A reinforced civilian bus, the Battle Bus can carry infantry units to the front line. Transported units can fire weapons from the windows of the Battle Bus. When immobilized, the Battle Bus becomes bunkered cover for the remaining troops.



New GLA Structures

Icon	Name	Description
	Fake Structures	Effective diversionary instruments, Fake Structures can force the enemy to change tactics or waste resources. However, Fake Structures can be upgraded to real structures, changing the battlefield circumstances once again.

New GLA Upgrades

Icon	Name	Description
	Worker Shoes	When given shoes, GLA workers can move quicker, which increases their productivity. Available at the Black Market.
	Camo-Netting	Applying Camo-Netting to Stinger Sites and Tunnel Networks wraps them in camouflage protection.
	Fortified Structure	The Fortified Structure upgrades the external armour of GLA structures. Available at Palace.
	Booby Trap	The Booby Trap upgrade allows Rebel units to place invisible explosive charges on any structure or building. Enemy combatants that attempt to commandeer them detonate the charges. Available at Barracks.







New GLA Generals Powers

Icon	Name	Description
	GPS Scrambler	GPS Scrambler accesses the Global Positioning System frequencies and scrambles satellite transmissions across a wide area. When deployed, GPS Scrambler hides units under a camouflage cloak.
	Sneak Attack	Using the Sneak Attack, the GLA can place a tunnel exit anywhere on the map, allowing personnel to strike an enemy's base from within the base itself. Attacking units should be positioned in the tunnel before deployment.

Tech Buildings

Located in tactically key locations on the battlefield, tech buildings can be captured for your side to provide productive functions for your army. In longer games, the capture of tech buildings can be critical to victory or defeat.

Note: To capture tech buildings, you must acquire the Capture upgrade from your barracks. For more information, please see the documentation that came with your original *Command & Conquer Generals* game.

Icon	Name	Description
	Tech Oil Derrick	When captured, an Oil Derrick delivers \$1000 to your funds and a steady stream of revenue thereafter.
	Tech Refinery	A Refinery reduces the cost of production of all of your units.
	Tech Hospital	A Hospital constantly heals all of your infantry on the battlefield.
	Tech Repair Bay	A Repair Bay constantly repairs all of your vehicles on the battlefield.
	Tech Artillery Platform	The Artillery Platform fires at your ground-based enemies within range.
	Tech Reinforcement Pad	At a Reinforcement Pad, air drops regularly deliver one of your assault vehicle types. Usually, it is a tank.

Generals Challenge

In Generals Challenge, you command a General's army featuring specialized units, structures and upgrades. Each army has faster or cheaper access to the weapons and structures needed to achieve victory using its unique set of tactics. Each General's strategies require you to find individualized counter-strategies to exploit weaknesses.

- Some elements of the standard USA, China, or GLA armies are unavailable for some Generals armies. However, some armies have units that are unavailable elsewhere in the game.
- All Generals Challenge armies can be used in Skirmish and Online play.

Starting Generals Challenge

To begin a Generals Challenge game:

1. In the Main menu, click SOLO PLAY.
2. In the Solo Play menu, click CHALLENGE.
3. Select a difficulty level.

Note: Superior Battle honours are awarded for success on higher difficulty levels. For more information, see *Battle Honours* on p. 7.

4. In the Choose Your General screen, you select the army to use.
To select a General, click a target icon on the screen. Review the General's biography at the bottom of the screen.
5. To begin a game with the selected General, click PLAY GAME. The first map and competing Generals are loaded.

General Malcolm "Ace" Granger





General Malcolm "Ace"
Granger

The son of an Iowa crop duster, General Malcolm Granger's flying career began at the age of 12, when he borrowed his father's biplane to go to the state fair in Kansas City. As a lieutenant in the Iraq War, Granger earned his first notices for knocking out four SAM sites in a single afternoon. As he moved up the Air Force ranks, Granger earned a reputation for advancing the role of fighting aircraft in the US military. Even-tempered yet uncompromising, Granger has developed novel techniques in fuel management and resource deployment during air superiority operations. Those techniques have been used with success in Iraq, Afghanistan and other theatres. His squadrons are known for precision execution and a strong will to complete the mission.


Background

- **Side:** USA
- **Rank:** 4-Star General
- **Branch:** US Air Force
- **Class Number:** 08291102-HBGB
- **Stationed:** Fort Belmont, Houston, Texas, USA
- **Tactical Overview:** Air force

Army Units

Icon	Name	Description
	King Raptor	The first generation of Raptors proved to be thin-skinned fighters. Engine modifications have allowed the King Raptor to carry a sturdier fuselage and better ammunition.
	Combat Chinook	In the previous campaigns against the GLA, Chinooks did not fare well. Lacking defences, the Chinook often was lost behind enemy lines, requiring rescue operations to recover any survivors. The Combat Chinook has side portals to allow passengers to target threats on the ground.

Army Upgrades

Icon	Name	Description
	Stealth Comanche	Comanche helicopters can be upgraded with stealth capabilities.

Army Modifications

- All aircraft receive laser point defence systems.
- Aircraft are cheaper to produce.
- A-10 Thunderbolts at Level 1, 2 and 3 cost fewer Generals points.
- Stealth Fighter is available at start.
- Crusader Tank is unavailable.
- Paladin Tank is unavailable.

General Alexis Alexander




General Alexis Alexander

A logistics staffer during the Second Korean War, Alexander attracted the notice of her superiors with her ability to acquire just about anything. Alexander harnessed that ability into winning a scholarship and a long and distinguished career in the Marines. To protect supply lines during the first GLA Conflict, Alexander developed a tiered scheme of defences that did not allow a single strike on any of her supply columns. While hardly efficient in her use of resources, General Alexander makes defence and resource acquisition priorities in the early phases of conflict. The General's army takes to the offensive only when she has superior offensive firepower that cannot be touched by counterattack.


Background

- Side: USA
- Rank: 4-Star General
- Branch: Marines Corps
- Class Number: 07121969-HB
- Stationed: Camp Franklin, Belfast, Maine, USA
- Tactical Overview: Superweapons
- Availability: Skirmish, Generals Challenge, Online


Army Structures

Icon	Name	Description
	EMP Patriot	The EMP Patriot battery can dispense a barrage of missiles that can deliver an electro-magnetic pulse (EMP) shockwave on structures, units and personnel.

Army Units

Icon	Name	Description
	Aurora Alpha	The newest model Aurora Bomber is equipped with Fuel Air Bombs. The Aurora Alpha's fuel explosives detonate in the air over a target, spreading fire across a considerable area. Capable of supersonic speeds, the FAB Aurora can outdistance enemy AA fire.

Army Upgrades

Icon	Name	Description
	Advanced Control Rods	Improvements in the design of control rods have resulted in greater efficiency and power output than conventional resources.

Army Modifications

- Particle Cannons cost much less to produce.
- All Vehicles cost more to produce.
- Paladin Tank is unavailable.
- Crusader Tank is unavailable.


General “Pinpoint” Townes

An early champion of laser technology in the USA Armed Forces, “Pinpoint” Townes developed comprehensive offensive and defensive strategies around laser-based weapons. As a 29 year-old Captain, he received an appointment to the U.S. Army War College in 2008 to teach his theories. However, Townes found academic life too slow and returned to a battlefield command in 2011. Relying on inexpensive, powerful laser technology throughout his forces and his unique knowledge of its strengths and weaknesses, General Townes has consistently received superior marks during war games and live-fire actions. This four-star general continues to push the technology envelope in harnessing energy and improving power efficiency and the Army is counting heavily on him.


Background

- **Side:** USA
- **Rank:** 4-Star General
- **Branch:** US Army
- **Class Number:** 00010204-0IKE0
- **Stationed:** Fort Union, Redwood Shores, California, USA
- **Tactical Overview:** Lasers
- **Availability:** Skirmish, Generals Challenge, Online

Army Structures

Icon	Name	Description
	Laser Defence Turret	The Laser Defence Turret cuts down the opposition with an intensive burst of light and heat energy. These powerful defensive batteries are effective against ground and air targets.

Army Units

Icon	Name	Description
	Laser Tank	Instead of firing a shell, this tank packs a more damaging laser. The Laser Tank requires considerable energy resources; base power levels must be maintained, or Laser Tanks become inactive.

Army Modifications

- Avengers cost less to produce.
- Tomahawk missile is unavailable.
- Crusader Tank is unavailable.
- Paladin Tank is unavailable.

General “Anvil” Shin Fai




General “Anvil”
Shin Fai

On the battlefield, China’s greatest resource is the millions of individuals in uniform and General Shin has staked a career on them. Known to his troopers as The Anvil, General Shin can mobilize four divisions in twenty-four hours thanks to a streamlined and sometimes brutal command structure. Discipline is very strong with General Shin and officers and infantry who can maintain it are rewarded. The General has developed advanced field training programmes for the Red Guard and elite operatives. Military analysts credit the speed and professionalism of General Shin’s peacekeeping units with preventing the Taiwan Conflict of 2018 from becoming a global war. His divisions feature several weapons and transport systems unique in the People’s Liberation Army.




Background

- Side: China
- Rank: General, Class AAA
- Branch: People’s Liberation Army
- Combat Number: 2030-200403-1
- Stationed: Camp Snake, Beijing, China
- Tactical Overview: Infantry
- Availability: Skirmish, Generals Challenge, Online


Army Structures

Icon	Name	Description
	Fortified Bunker	A Fortified Bunker can protect up to ten infantry from a direct bomb hit. Additionally, it is mined to prevent ground-based assaults.

Army Units

Icon	Name	Description
	Assault Troop Transport	This self-contained troop carrier allows the forward deployment of infantrymen. On-board medical staff can heal troopers in the vicinity.
	Mini-Gunner	A Red Guard armed with a Gattling gun, the Mini-Gunner has significant advantage over infantry equipped with more conventional weapons.
	Attack Outpost	An improvement on the Listening Outpost, this unit is equipped with four Tank Hunter units inside and can hold up to a total of 10 infantry units.

Army Generals Powers

Icon	Name	Description
	Para Drop	Deployed from the Command Centre, Para Drop delivers paratroopers to any accessible location on the map.

Army Modifications

- All infantry start at Veteran level.
- Nationalism upgrade is available at start.
- Horde Bonus is increased.
- Battlemaster Tank is unavailable.
- Overlord Tank is unavailable.

General Tsing Shi Tao




General Tsing Shi Tao

General Tsing gets what he wants, at any cost. Impatient to a fault, General Tsing relies heavily on nuclear technology on the battlefield. Unfortunately, there have been several terrible accidents. While General Tsing was the responsible officer during the Mudanjiang Disaster of 2014, his considerable talents saved his career. General Tsing believes such trials and errors are part of the development process. His divisions are beginning to see the results of his convictions, as a prototype of an Advanced Nuclear Power Plant has produced better results. Programmes to develop tactical nukes and to promote stability in radioactive isotopes are producing better safety records, which will be well-received by his troops.


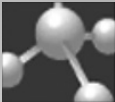

Background

- **Side:** China
- **Rank:** General, Class AAA
- **Branch:** People's Liberation Army
- **Combat Number:** 0000-000000-1
- **Stationed:** Base Ox, Chengdu, China
- **Tactical Overview:** Nuclear energy
- **Availability:** Skirmish, Generals Challenge, Online

Army Structures

Icon	Name	Description
	Advanced Nuclear Power Plant	Technological innovations in energy collection have produced a superior Nuclear Power Plant, which generates more output.

Army Upgrades

Icon	Name	Description
	Nuke Bomber	This modified Carpet Bomber delivers a number of tactical nuclear warheads on target. Residual radiation can be hazardous to troopers in the area.
	Isotope Stability	Stress tests in the field have revealed that the nuclear-powered tanks from China are vulnerable and dangerously combustible. The Isotope Stability upgrade delivers cleaner nuclear fuel to tank units.
	MiG Tactical Nuke	Purchased at the Nuclear Missile Silo, this upgrade places tactical nuclear missiles under the MiG's wings.

Army Modifications

- All tanks start with Uranium Shells and Speed upgrades.
- Power Plants generate more power.
- Nuke Cannon is available at start.

General Ta Hun Kwai




General Ta Hun Kwai

General Ta Hun Kwai is convinced that the People's Liberation Army will see its greatest military successes in this century through the view holes of its tank divisions. A disciple of Soviet tank tactics of the Cold War, General Ta has produced technical papers on various modifications to them. He has initiated development of techniques to reduce the costs of tank production and has sponsored the Emperor programme, whose first tanks rolled off the assembly line in 2019. Considered part of the old guard in the PLA hierarchy, General Ta nevertheless continues to roll up victory after victory in battle.




Background

- **Side:** China
- **Rank:** General, Class AAA
- **Branch:** People's Liberation Army
- **Combat Number:** 9999-322436-5
- **Stationed:** Base Rat, Jinan, China
- **Tactical Overview:** Tanks
- **Availability:** Skirmish, Generals Challenge, Campaign Play, Online

Army Units

Icon	Name	Description
	Emperor Tank	The latest generation of Overlord Tank comes equipped with turret-mounted Propaganda Towers. Emperor Tanks can be upgraded with Gatling Cannons for stronger force projection.

Army Generals Powers

Icon	Name	Description
	Tank Drop Level 1	This Level 3 Generals Power can drop one Battlemaster Tank anywhere on the map.
	Tank Drop Level 2	This Generals Power can drop two Battlemaster Tanks anywhere on the map.
	Tank Drop Level 3	This Generals Power can drop three Battlemaster Tanks anywhere on the map.

Army Modifications

- All tanks start at Veteran level.
- Tanks cost less to produce. Construction time is unchanged.
- Aircraft cost more to build.
- Nuke Cannon is unavailable.
- Inferno Cannon is unavailable.

Dr. Thrax




Dr. Thrax

Little is known about the GLA associate codenamed “Dr. Thrax.” While background intelligence indicates that he received training as an immunologist in Jordan, he left academics in 2005 and disappeared into a terrorist-controlled ghetto in Cairo. For the past twenty years, he has produced chemical and biological weapons for terrorist organizations across the globe, including the GLA. Recent eavesdropping on mobile phone traffic indicates that Dr. Thrax has become more involved in the day-to-day operations of the GLA. He has scattered labs across Asia and the Middle East, where low-cost WMDs are produced and distributed to local terrorist cells. A cautious and scientific personality, Dr. Thrax never sleeps in the same bed two nights in a row and undergoes frequent cosmetic surgery to alter his appearance.


Background

- **Side:** GLA-allied
- **Rank:** Unknown
- **Cell:** Unknown
- **ID Number:** Unknown
- **Hometown:** Unknown
- **Tactical Overview:** Biological and chemical weapons
- **Availability:** Skirmish, Generals Challenge, Online


Army Structures

Icon	Name	Description
	Toxin Network	This type of tunnel entrance is protected by a toxin-based weapon.

Army Units

Icon	Name	Description
	Toxin Rebel	Armed with a backpack full of toxin, the Toxin Rebel can dispense lethal chemical or biological weaponry on enemy units, even if they're garrisoned in a fortified building.

Army Upgrades

Icon	Name	Description
	Anthrax Gamma	A third-generation biological agent, this upgrade has proven to be even more lethal than Anthrax Beta in field tests.

Army Modifications

- All tanks start with Toxin Shells.
- All Toxins begin as Anthrax Beta.
- Some missiles are Toxin Tipped.
- Camouflaged units or capabilities are unavailable, except for Jarmen Kell.

General Rodall “Demo” Juhziz




General Rodall
“Demo” Juhziz

This bombmaker of Middle Eastern ancestry is responsible for some of the most devastating terrorist attacks of the twenty-first century. General Juhziz and his organization have been tied to both the attack on the US Embassy in Cairo and the sinking of the *USS Nelsen* in 2012. Such bold strikes have drawn more supporters to his side, including bombers from many nations willing to sacrifice their lives for the causes of the GLA. General Juhziz lost the use of a hand in a bombmaking accident and rarely speaks to anyone outside of his own organization.


Background

- **Side:** GLA
- **Rank:** Unknown
- **Cell:** Scorpion
- **ID Number:** Unknown
- **Homeland:** Unknown
- **Tactical Overview:** Innovative bombs and explosive technology
- **Availability:** Skirmish, Generals Challenge, Online

Army Structures

Icon	Name	Description
	Advanced Demo Trap	Advanced Demo Traps are cheaper to produce, faster to assemble and more destructive than their predecessors.

Army Upgrades

Icon	Name	Description
	Demolition	When upgraded at the Palace, all units and structures can self-detonate on command.

Army Modifications

- Bomb Trucks cost less to produce.
- All Terrorists do more damage.
- Booby Trap upgrade is available at start.
- Combat Cycles are ridden by a Terrorist at start.
- Stealth units or capabilities are unavailable, except for Jarmen Kell.
- Toxin upgrades are unavailable, Scud Storm, Scud Launcher and Bomb Truck are packed with explosives.

Prince Kassad



Prince Kassad

Prince Kassad has cut a dashing figure across Middle Eastern politics and a violent one in the underworld. This charismatic tribal leader has organized spies and assassins across North Africa to do his bidding. Prince Kassad has been paid millions for assassinations, hijackings and beatings in the street. For a three-year stretch beginning in 2013, it is believed that no terrorist action was taken on the shores of the Mediterranean Sea without his involvement or blessing. A clever administrator of a serpentine organization, he has never been directly tied to any criminal activity, yet bad things continue to happen to individuals and forces that stand in his way.

Background

- **Side:** GLA
- **Rank:** Unknown
- **Cell:** Cobra
- **ID Number:** Unknown
- **Hometown:** Tripoli, Libya
- **Tactical Overview:** Camouflage
- **Availability:** Skirmish, Generals Challenge, Online

Army Modifications

- All structures can upgrade with Camo-Netting.
- Workers are camouflaged when collecting supplies.
- Camouflage upgrade is available to Rebels at start.
- Base Defences start with Camo-Netting.
- Hijacker is available at start.
- GPS Scrambler costs fewer Generals points.
- GPS Scramble is available at Level 3, instead of Level 5.
- GPS Scramble recharges faster.






Online* Addendum

In this chapter, you can check out brief reviews of some components and basic tactics of online play.

***AN INTERNET CONNECTION IS REQUIRED FOR THIS FEATURE. EA RESERVES THE RIGHT TO TERMINATE THE ONLINE FEATURE(S) FOR THIS PRODUCT AFTER 90 DAYS NOTICE.** Subject to online Terms of Service and all features may not be available at time of purchase. Please check online at www.generals.ea.com for more information.

Online Game Icons

In Online lobbies, the list of available games includes icons to indicate important information about the game and your connection to it.

Icon	Name	Description
	Recording Stats	Statistics for this game are tabulated in your online Persona.
	Password Required	This icon is placed next to games that require a password. If you do not have the password, you must contact the host to receive it.
	Excellent Connection	A green light indicates a good connection between your computer and the host computer. <u>Join these games, when possible.</u>
	Fair Connection	A yellow icon indicates a fair connection. You may or may not have problems playing in these games.
	Poor Connection	A red icon indicates a poor connection and a high ping time.

Changes to Creating an Online Game

When you create an online game in *Command and Conquer Generals Zero Hour*, you can set the following new options.

- | | |
|--------------------|--|
| Limit Armies | To limit the available armies in the upcoming game to the original USA, GLA and China armies, check this box. |
| Record Stats | To record the results in your online Persona record, check this box.
Note: If Record Stats is enabled, Starting cash is fixed at \$10,000, all armies are available and the number of superweapons is unlimited. User-created maps are not allowed for Recorded Stats games. |
| Limit Superweapons | After the online game has been created, you can limit each side to only creating one superweapon during the course of the game. |
| Starting Cash | When available, you can change the amount of funds with which each side starts. |

Online Tactics

In online games, things happen very fast and games can be overwhelming if you aren't prepared. The number of strategies in online play is large, and their effectiveness is varied. The following section covers some basic strategies for online play for each side.

Money Matters Most

Unless your online game begins with a high starting balance of funds, your first task is to develop a supply chain to gather resources and process them, as well as providing some protection for those units.

- **China:** Build a Supply Centre as soon as possible, but limit the number of Supply Trucks to two; building more wastes resources, unless you have to cover a long distance between your Supply Centre and the nearest depot.
- **GLA:** The Supply Stash can process resources a little faster than the other factions' gatherers, so use that to your advantage. Build six or more workers to keep the supply lines full. Be sure to protect your workers with armoured units; GLA workers can be run over. Some opponents may use this dishonourable tactic early in games.
- **USA:** Although expensive, the Chinook is the fastest and most efficient gatherer of resources. These fast helicopters have to provide more funds to build and maintain the expensive units and structures of the USA. Keep two Chinooks in the air at all times.

Secondary Money Makers

Particularly in resource-scarce maps, the secondary money makers for each side can weigh heavily in the balance of the game. Develop them during the early stages of the game to influence the latter parts. For any side, try to get to the neutral resources such as the oil derricks before the opposition can.

- **China:** A few Hackers in an Internet Centre can provide plenty of funds.
- **GLA:** The Black Market is an excellent secondary source of income. With 20 dollars coming in every few seconds, a handful of these structures can expand your coffers quickly.
- **USA:** Later in the game, the USA can rapidly acquire additional funds by building a few Supply Drop Zones. Although these structures consume your power, they pay the bills when the drop arrives. Nothing can stop a Supply Plane on a delivery, including enemy fire.

The Base Line Defence

Before you build the offensive firepower to overwhelm the enemy, you must protect the perimeter of your fledgling base. A punishing attack in the early stages against your base can all but eliminate your side from the game.

On defence, you have to prioritize. From which direction is the attack likely to come? What units are likely to be employed? Although you never want to leave any entrance completely unprotected, it is very difficult to protect two entrances well, let alone three. Choose early and wisely. Against most players, protect yourself against a frontal attack.

A solid defensive scheme involves building a line of staggered units and structures with differing effectiveness against enemy units. You certainly want longer-ranged weapons to soften inbound targets before they breach the perimeter. Anti-air is important, too.

- In some map configurations, enemy units are funneled through narrow entrances to your base, around which a semi-circle of defensive units can decimate them.
- Where possible, defend from elevated ground with projectile-type units. The range of your units is improved from a raised position.

Build a line of alternating units of these types for each side:

- **China:** Surround a manned Bunker with Tank Hunters and a few Gattling Cannons.
- **GLA:** Alternate GLA Stinger Sites with a couple of Tunnel Networks populated with RPG Troopers.
- **USA:** Alternate four Patriot Missiles and four Firebases. Add Missile Defenders to the Firebase as funds permit.

Do not expend all of your build time and planning on defences, as a good player can take them out early in the game. You must prepare to attack.

The Attack

As on your defensive line, it is a good idea to balance your primary attacking units with other units that defend the attackers' weaknesses. Your investment in the attack must be protected. To the degree that you can, try to gather information about the defences arrayed in front of you before you tumble face-first into them. Gathering such information may require advanced technology or probing attacks beforehand.

Probing and Reconnaissance

An ideal probing attack covers as much of the enemy's territory as possible, so speed is very important. While your primary goal is to find out more about his base defences and structures, you should also try to rattle his cage a bit. If you can do some damage on your probing attack, you can see how your opposition's defences are likely to respond to a larger attack. You may even force him to redeploy his resources to the attacked area, opening the door for an attack from another direction.

For each side, consider the following basic probing and reconnaissance attack groups:

- **China:** Send a pair of Gattling Tanks, which are fairly speedy. If you have airpower, the presence of a single MiG in the enemy camp can force him to rethink the composition and structure of his defences.
- **GLA:** Use Technicals or Combat Cycles to move quickly through the enemy's camp. Since Combat Cycles acquire the capabilities of the infantry that ride them, you can turn the Combat Cycle into a more powerful weapon. Five Combat Cycles ridden by Terrorists into your opponent's Command Centre certainly changes his point of view.
- **USA:** A Humvee packed with Missile Defenders and protected by a spy drone can be a very effective reconnaissance platform. When the technology is developed, the Sentry Drone may be more cost-effective.

Strikes

Sometimes, the goal of the attack is to strike a specific target and to retreat safely. Whilst speed is important on such attacks, you want to assemble enough firepower to finish the job when the defences have been penetrated. Although the primary goal is to take out a unit or structure, returning your strike forces to your base speeds the process of developing the next attack. For each side, there are many ways to assemble a successful strike attack. So much depends on the target, map location and surrounding defences; experience will be your guide.

Full-Force Attack

When it's time to end the fight, you should build an attack force of sufficient size to overwhelm the enemy's defences and to destroy all enemy units and structures. Often in a final battle, there is a deciding moment in which your army or the defending one gains the upper hand. If you find yourself unable to push through the perimeter of the enemy's defences, it is better to pull back to fight another day.

- Do not commit all of your funds or resources to the attack, unless the situation is desperate. A fully committed army is dangerously exposed to counter-attack. After you have built your strike force and begun to deploy it, begin building replacements for the units likely to be lost in the battle.

When building your attack force, it's important to protect the weaknesses of your primary attackers with units that can do so. A balanced composition in your attack is key. For an attack, consider the following deployments for each side:

- **China:** Start with four Overlord Tanks, with two of them upgraded with Propaganda Towers and two with Gattling Cannons. Add two independent Gattling Cannons to reinforce the Overlord Tanks when under attack. Keep two Nuke Cannons behind the main force, as they are very effective against structures. If you are relying on infantry, use an Attack Outpost loaded with Mini-Gunners.
- **GLA:** Build 10 Scorpion Tanks with the Rocket upgrade. For anti-air coverage, add four Quad Cannons. Behind the main force, a pair of SCUD Launchers provides support.
- **USA:** The prime attackers for the USA are the Paladin Tanks. Build five or six of them. Behind the tanks, bring two or three Tomahawk Missile units for long-range attacks. Add a few Humvees with Missile Defenders in them. Behind the main force, bring along two Avengers for anti-air protection.

Tournament Ladders

For competitive players, *Command & Conquer Generals Zero Hour* offers tournament ladders for QuickMatch play. In a tournament ladder, you play games of a consistent type (1v1, 2v2) against other players. The results of your games are accumulated and determine your ranking in the ladder.

To sign up for a tournament ladder:

1. Go to <http://generals.casesladder.com> Sign up for an appropriate ladder.
 2. Start *Command & Conquer Generals Zero Hour* on your computer.
 3. In the Main menu, click MULTIPLAYER. Login to the Online Lobby.
 4. Click QUICKMATCH.
 5. Click SETUP.
 6. From the Choose a Ladder drop-down list, select the ladder that you joined.
- You can turn off the usage of ladders in the Choose a Ladder drop-down. Ladder results are not recorded for these games.
7. QuickMatch matches you exclusively with players from your tournament ladder. All results of your QuickMatch games are automatically sent to your ladder.

To see your current ladder rank, visit <http://generals.casesladder.com>

World Builder in Brief

This section provides a very brief overview on how to build multiplayer maps using the *Command & Conquer Generals World Builder*.

Note: The *Command & Conquer Generals World Builder* tool is provided on an “as-is” basis. It is not supported by Electronic Arts Technical Support. Please see the EA Tools End User License on boot-up for details.

- For more information, visit <http://www.generals.ea.com>

Map Layout Tips

Here are some tips to consider when laying out your map.

Don't

- Don't litter the map with sources of money. Each player should have access to \$40,000 to \$60,000. Watch the number of oil derricks that you leave on the map.
- Don't confine yourself to the rectangular or symmetrical map. Maps of differing shapes can be a lot of fun to play.
- Don't become infatuated with choke points. When you do create a choke point, it should be as wide as at least five tank lengths at a minimum.
- Don't isolate bases. Don't build mazes either. The GLA, in particular, needs room to manoeuvre.
- Don't make the only access to a base area over a bridge. For each bridge, your map should have at least one other way to cross the gap.
- Don't overlap textures. You can create nice effects without the overlap. Textures blended three ways slow down the game.
- Don't use massive objects in your maps often. If you must, make them Indestructible and Unselectable.
- Don't build lots of flowing rivers. Instead, try to build rivers that cut into the map and then cut back out.
- Don't go crazy building fences. A long string of fences is a big hit on system resources.

Do

- Do make a sketch first. It can provide a clearer view of relative positioning of large features.
- Do add 70 tiles (700 feet) in all directions of the landplot. You can always trim back.
- Do try to accommodate various styles of play. Don't require one style of play to dominate the map.
- Do build large areas for your bases. Make a base area at least the size of 5 x 5 Command Centres. Be sure to make enough room for Airfields.
- Do build space at the back of each base area where troops can be dropped for surprise attacks.
- Do create open space between base areas in a multiplayer map. Create spaces where big battles can be resolved.
- Do check to make sure that there are at least three ways to access each base area. There should be two direct routes and a third indirect route.
- Do give cliffs their own unique texture. It helps to identify them.
- Do limit yourself to about 100 objects per player in a multiplayer map.

Seventeen Steps to Creating a Multiplayer Map

You can begin right away to create exciting multiplayer maps by following these seventeen steps.

Note: These steps do not provide detailed instructions on how to accomplish them in the *World Builder*. To download the complete documentation, please visit www.generals.ea.com

Cardinal Rules for Multiplayer Maps

For each player, try to make \$60,000 in resources, which is two supply piles of standard size and perhaps a single oil derrick.

Avoid using lots of civilians in multiplayer maps. They slow your frame rate and get in the way of the fun.

Maximum multiplayer map sizes. For two-player maps, the max size should be 250 x 250 tiles. For four to six players, 350 x 350. Eight player maps should not exceed 450 x 450.

Seventeen Steps for Multiplayer Maps

1. **Decide the map layout.** Before you begin, you should have a good idea of what you're trying to develop in your map. Making more decisions at the beginning of development can streamline the process of finishing the map.
2. **Prototype your map.** When you're deciding your layout, you may choose to sketch your ideas on paper. To flesh out your ideas in the map, follow a top-down approach. Work out the largest features of the map. Have a basic idea of where you want the various sides to build their bases.
3. **Set waypoints.** It's a good idea to mark the locations of bases and resource depots with waypoints early in the map development process.
Note: If you are creating waypoints to identify where players are going to begin in a multiplayer map, the names must follow a specific format. For example, "PLAYER_1_START" is always the starting location for Player 1. For each player in a multiplayer map, you must also create a player in the Player List.
4. **Build the basic terrain.** At this point, you just want to create the basic features in their approximate locations at relative heights to each other.
5. **Check the size.** Remember that you have to add extra workspace to your map and should create impassable terrain at the edge. Adjust your map size accordingly.
6. **Build the terrain in detail.** Use the Mound and Dig tools to raise and lower terrain to the heights that you want. Use the Smooth Height tool to blend the peaks and valleys into a more natural appearance.
7. **Add a perimeter to your map.** Keep a fringe of unplayable terrain around your map that is at least 70 tiles on each side. You should also have terrain on the edge of your map that units cannot cross.
8. **Create waterways.** Next, create the bodies of water on your map. You can shape a water polygon around multiple lake beds or rivers. When possible, use the default water plane in your map.
9. **Paint textures.** Now that all of your terrain shapes have been created, you can paint textures on them to create realistic map features.
10. **Refine and blend textures.** After defining the large texture areas, you can tweak the textures of individual cells and blend textures together.
 - **What about the funny textures on cliffs?** When you apply textures to steep surfaces such as cliffs, the textures are stretched to cover the area. The results can be ugly. Smooth cliffside textures.

11. **Place combat and civilian objects.** Place only objects that exist at the beginning of the game.
12. **Roads, railroads and bridges.** Roads, railroads and bridges can be key tactical points on your maps and add colour to your urban landscapes. These elements are specialized textures that are treated like objects.
13. **Place resources on your map.** Place supply docks, oil derricks and loose piles of supplies in equal quantity at equal distance from the starting points for each player.
14. **Create and Name Waypoints.** Sets of waypoints can be sequenced together into waypoint paths that units and teams can follow.
15. **What's the ambiance?** Ambient sound can be added to your map to add life to the civilian structures on it. Put no more than three ambient sounds in any screen.
16. **Test in the game.** When you have finished adding all of the elements to your multiplayer map, test it in the game. Spend some time in the map as a single player and test it with a couple of friends.
17. **Optimize tiles.** Prior to releasing your map, you should attempt to optimize your texture tiles.

Installing and Running Multiplayer Maps

1. Place the map file, the .TGA preview file and any related files inside a new folder with the **identical** name as the map file, minus the filename extension.
2. Move this folder into the following directory: **My Documents\Command and Conquer Generals Zero Hour Data\Maps**. For each multiplayer map that you create or download, create a new folder in this directory, following the naming conventions in Step 1.
 - When playing multiplayer maps online, the creator of the map should host the game. The map is automatically transferred to all players that join. A completed map should be approximately 1MB.
3. To host a game using a user-created multiplayer map, start *Command & Conquer Generals Zero Hour*. In the Main menu, select MULTIPLAYER and then log in. In the Lobby screen, click CREATE GAME. Set the parameters for the game and click SELECT MAP. Then, click UNOFFICIAL MAPS and select the map to play. Click ACCEPT. When all players are ready, click PLAY GAME to begin.
 - In Sandbox mode, you can test your created multiplayer maps by yourself. Create a multiplayer game over a Network, select your map and then click PLAY GAME. As the only player on the map, you can explore and fine-tune your creation as needed.

Credits

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Translations: Around The Word

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Language Tester: Erwan Jegouzo, Clément Duval

Localization Germany

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Translations: Robert Böck, Elmar Seeberger

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Translations: Synthesis International S.r.l.

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Cameo and Generals' Photos

Wardrobe, hair & makeup: Jodi DeMarco

Casting: Deborah German Casting

Studio: Out West Studio

Models: Jacob Dass, T. R. Devitt, Jaime Guintu, Majid Kathib, Nabille Lalaoua, Robert Lee, Sunil Malhotra, James Peak, Hans Raith, Karina Thomas, Pamela Woon, John Yang

News Reporter Videos

Producer: Robert Benjamin

Visual Effects & Editing: Robert Baily

Actors

Julian Stone as James Seabury

Catherine Dao as Sun Mei Ying

Mike Saad as Omar Bin Ghazali

Crew

Writer: Paul DeMeo

Producer: Robert Benjamin

Visual Effects & Editing: Robert Baily

Studio: Out West Studio

Intro Movie by: Mondo

External Multiplay Map Contributors: Bryan Hansen, Edwin Huisman

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EALA General Manager: John Batter

EA Worldwide Development Executives: Don Mattrick, Paul Lee, Bruce McMillan

Very Special Thanks to the Command & Conquer fan community.

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