Command & Conquer Tiberian Sun

A Player's Guide

By Mole40k

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1. Introduction – a note from the author

It's been over 6 years since I launched *Tiberian Sun: A Player's Guide*, and a lot has happened in that time. For a start, Tiberian Sun (TS), and its expansion Firestorm have both been made freeware, and are now available to download legally for free. This has led to a whole new generation of players discovering the game that for many of us has played an important part in shaping our lives. It may not be the best RTS game ever made, and it may not even be the most fun RTS ever made, but for many of us Command & Conquer Tiberian Sun holds a special place in our hearts.

For those of you who are reading this guide for the first time, I bid you welcome. This guide has been designed with new and improving players in mind. In it I cover the basics of money management, scouting, attack and defence. I also provide a number of examples to demonstrate simple ways to improve your standard of play. To my knowledge, no one has ever written a guide to TS as extensive as this document I present to you now. I hope it serves you well and inspires you to bigger and better things in your TS playing career. If you can take away just one small thing from this guide to help you improve as a player then in my opinion, this guide has done its job.

Good luck commander!

Mole40k

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2. Getting Started

Tiberian Sun can be a complex game at times, but at its heart rests a simple philosophy that can sometimes be easy to miss. Though the aim of the game may seem obvious to some readers, the actual thought processes behind decisions you make in-game are very important. Lose sight of the fundamental objective and you will never realise your full potential as a TS player.

For now though let me state this one point clearly: *the aim of the game is to destroy your opponents' bases while preserving your own.* If you don't do this, then quite simply, you will not win.

Rules

At this stage it important to clarify the only rule of TS, and that is this: **no cheating of any kind is allowed**. Cheating includes using map reveal trainers, exploiting the build anywhere glitch, making non-standard game units and also knowingly causing reconnection or disconnect errors for personal gain or for the annoyance of others. This list isn't exhaustive, but to be honest it's all common sense. Don't cheat. No one will respect you if you do. If you're going to cheat on TS servers, we don't want you playing our game.

Note that the no cheating rule is the *only* rule of TS. For clarity, this means:

1. Engineer rush *is* allowed.
2. Harvesters can be used for whatever purposes a player chooses.

As long as you're not cheating, anything goes.

3. Unit descriptions

GDI

Light Infantry

Prerequisite: Barracks
Range: Short
Primary Weapon: Minigun
Secondary Weapon: N/A
Speed: Medium

Description – The mainstay of both Nod and GDI forces, Light Infantry are the generic infantry unit in the game used mainly for scouting and anti-scout purposes. Infantry can also be used to rush your opponent early in the game with the intention of slowing them. Note that if you leave your rush too late you will find your opponent teched and your men bombed or burned to a crispy napalm-fuelled death.

Disc Thrower

Prerequisite: Barracks
Range: Short
Primary Weapon: Disc grenades
Secondary Weapon: N/A
Speed: Slow

Description – An extremely capable unit in the right hands, GDI Disc Throwers give GDI a notable advantage in the early stages of the game. Using the CTRL button to force fire disc-men can double their already superior range and can give you a number of tactical opportunities for bouncing discs over cliffs or into blue Tiberium fields. But a word of caution: when engaged in an infantry battle try not to group Disc Throwers too closely together, and try to keep them away from the direct line of fire as they are often inclined to explode when killed, damaging nearby units or if you're really unlucky, exploding in a chain.

Engineer

Prerequisite: Barracks
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Slow

Description – Slow and unarmed, Engineers are one of the most useful and important units in the game. Useful both in attack and defence Engineers can often be a game winning unit if used effectively to repair important buildings when under attack, or to steal buildings in an Engineer rush.

Medic

Prerequisite: Barracks
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Slow

Description – Rarely used except in conjunction with a Ghost Stalker, Medics are solely responsible for healing infantry units in your GDI army. Medics can also be used together with an infantry rush to heal units as you go, though this is rarely done in the modern game with players instead preferring to spend the money on extra men giving them less to think about in the control-frenzy that is an infantry battle.

Jump Jet Infantry

Prerequisite: Barracks, Radar
Range: Short
Primary Weapon: Rifle
Secondary Weapon: N/A
Speed: Medium

Description – An extremely useful scouting unit, Jump Jet (JJ) infantry are good for scouting over difficult or impassable terrain such as cliffs. Note that in order for your ally to see what you have scouted with your JJ, you need to land them. As well as scouting JJs can also be used in a nuisance role when attacking an enemy base as they force your opponent into spending money on either an MLRS or a SAM. JJs are particularly useful in games on big maps.

Ghost Stalker

Prerequisite: Barracks, Tech Centre
Range: Short/Medium (Rail Gun)
Primary Weapon: Rail Gun
Secondary Weapon: C4
Speed: Medium

Description – With the ability to shoot through multiple enemies at once while also being armed with invaluable C4 explosives, the Ghost Stalker (GS) can be a powerful unit in the right hands. A GS can be used both in an offensive or defensive role, and when combined with medics as a bodyguard can be very effective at slowing your opponent. The GS's ability to take out a building with a single round of C4 makes it very useful if you can avoid your opponent's base defences. Remember though that in a one-on-one battle, a Cyborg Commando (CC) can kill a GS in a single shot. Avoid Cyborg Commandos at all costs.

Wolverine

Prerequisite: War Factory
Range: Short
Primary Weapon: Chain Gun
Secondary Weapon: N/A
Speed: Fast

Description – Though they may be classed as an anti-infantry unit, in general, Wolverines are ineffective and expensive. They can however be quite useful as a scouting unit on large maps due to their high speed and light armour that can sometimes allow them to sneak past infantry guards surrounding an enemy base.

Amphibious APC

Prerequisite: War Factory
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Fast

Description – A multi-purpose unit, the GDI APC can be used to launch attacks, defend against infantry attacks (squashing men) and scout over water with its amphibious ability. The GDI APC is a very useful unit that gives a player many tactical possibilities in-game. Do not underestimate it.

Titan

Prerequisite: War Factory
Range: Medium
Primary Weapon: 90mm cannon
Secondary Weapon: N/A
Speed: Medium

Description – Titans are quite possible the best all-round unit in the game. Not only is the humble Titan fairly cheap and a very effective defensive unit against pretty much anything, it can also be put to good use in attack with its ability to 'Q move' (move and shoot); something which its Nod counterpart the Tick Tank cannot do. From an opposing player's point of view it is important to note that as with all vehicles the Titan is vulnerable to EMP.

Hover MLRS

Prerequisite: War Factory, Radar
Range: Medium

Primary Weapon: Rockets
Secondary Weapon: N/A
Speed: Medium

Description – Like the Amphibious APC, the hover MLRS is capable of crossing both land and sea. This makes it an ideal unit for launching surprise attacks over rivers. You should remember when planning such attacks that the MLRS has weak armour so try not to expose it to your opponent's defensive units if at all possible. Note also the MLRS ability to shoot at both land and air targets making it a useful unit for defending against JJ scouts.
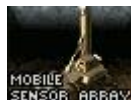
Mobile Sensor Array (MSA)

Prerequisite: War Factory, Radar
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – A non-fighting unit that cannot be done without when fighting against Nod opponents, the MSA allows a player to detect stealth and subterranean units within its radius of operation once deployed. As well as being used in a stationary defensive role, the MSA can also be used aggressively against a stealthed opponent, driving it near to an opponent's base and deploying so as to be able to either mark a base or coordinate an attack later on in the game.

Disruptor

Prerequisite: War Factory, Tech Centre
Range: N/A
Primary Weapon: Disruption beam
Secondary Weapon: N/A
Speed: Medium

Description – An extremely powerful unit that can – if used correctly – destroy a Refinery or War Factory in a single shot, the Disruptor is one of the mainstays of the GDI attack.

Mammoth MK II

Prerequisite: War Factory, Tech Centre
Range: N/A
Primary Weapon: Rail Gun
Secondary Weapon: SAM missiles
Speed: Slow

Description – Useful both in attack and defence the Mammoth MK II (MK) is armed with similar rail guns to that used by the Ghost Stalker. As such the MK is capable of shooting through multiple units at a time, though needs to be used in conjunction with a Carryall in order to be at its most effective given its slow movement speed.

Mobile EMP *(Firestorm Unit)*

Prerequisite: War Factory, EMP Cannon
Range: Short
Primary Weapon: EMP pulse
Secondary Weapon: N/A
Speed: Medium

Description – An interesting (if little used) unit the Mobile EMP is primarily a defensive unit, though some players have been known to use Mobile EMP vehicles as the first unit of an attack .

Juggernaut *(Firestorm Unit)*

Prerequisite: War Factory, Radar
Range: Long
Primary Weapon: Light artillery shells
Secondary Weapon: N/A
Speed: Medium

Description – A very useful unit in the TS Firestorm expansion, the Juggernaut is the GDI answer to Nod Artillery. Useful against infantry thanks to its wider spread of fire the Juggernaut can also be used effectively as an offensive unit when placed out of range of an opponent's defences.

Orca Fighter

Prerequisite: Helipad
Range: N/A
Primary Weapon: Rockets
Secondary Weapon: N/A
Speed: Medium

Description – Good when used in large units against buildings or vehicles, Orca Fighters should not be used against non-cyborg infantry.

Orca Bomber

Prerequisite: Helipad, Tech Centre
Range: N/A
Primary Weapon: Bombs
Secondary Weapon: N/A
Speed: Slow

Description – A powerful unit in both attack and defence the Orca Bomber is particularly useful for defending against infantry/Titan rushes and also in a harassment role to take out enemy Helipads and defences. When grouped together in large numbers Orca Bombers can 'power bomb' main enemy structures such as MCVs, War Factory Factories and Refineries.

Carryall

Prerequisite: Helipad, Service Depot
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Fast

Description – Possibly the most useful unit in the game. Be it Disruptor drops, MK control, moving Harvesters to new Tiberium patches or working an MCV, the GDI Carryall is a unit that should figure in every GDI battle plan.

Nod
Light Infantry

Prerequisite: Hand of Nod
Range: Short
Primary Weapon: Minigun
Secondary Weapon: N/A
Speed: Medium

Description – As with the equivalent GDI unit, Light Infantry are the generic infantry unit in the game used mainly for scouting and anti-scout purposes. Infantry can also be used to rush an opponent early in the game. Control of Light Infantry is particularly important to a Nod player as GDI have the advantage in infantry battles with their superior anti-infantry units.

Rocket Infantry

Prerequisite: Hand of Nod
Range: Short
Primary Weapon: Bazooka
Secondary Weapon: N/A
Speed: Slow

Description – A very important unit in defending against aerial units, Titans, Disruptors and MKs, Nod Rocket Infantry need to be controlled very carefully in order to keep them away from Light Infantry and other anti-infantry units.

Cyborg

Prerequisite: Hand of Nod
Range: Short
Primary Weapon: Machine gun
Secondary Weapon: N/A
Speed: Slow

Description – The unit of choice for players new to the game, Cyborgs are a poor choice except in certain circumstances where they can be used in an early scouting role. Cyborgs are both slower and more expensive than other infantry units and their ability to regenerate in Tiberium fields is no compensation in normal non-mod-map play.

Engineer

Prerequisite: Hand of Nod
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Slow

Description – Slow and unarmed, Engineers are an extremely important unit for Nod players. Useful both in attack and defence Engineers can often be a game winning unit if used effectively to save important buildings when under attack, and equally importantly to steal buildings in a Subterranean APC-Engineer rush. Please note, Engineer rushes are a perfectly legitimate form of attack.

Mutant Hijacker

Prerequisite: Hand of Nod, TON
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – Hijackers are a useful but expensive unit that can only be built with a Temple of Nod. Hijackers are mainly used as a defensive unit for capturing Disruptors (or if you're really lucky, a MK) and are also a legitimate way of MCV swapping with an allied player.

Cyborg Commando

Prerequisite: Hand of Nod, TON
Range: N/A
Primary Weapon: Plasma Cannon
Secondary Weapon: N/A
Speed: Slow

Description – The most powerful infantry unit in the game the Cyborg Commando (CC) gives the Nod player a very capable unit of dealing with infantry, vehicles and buildings alike. Vulnerable to concentrated fire, you should be sure to control your CC carefully and return to base to heal and repair the attached Subterranean APC if necessary.

Attack Buggy

Prerequisite: War Factory
Range: Short
Primary Weapon: Chain Gun
Secondary Weapon: N/A
Speed: Fast

Description – Nod's answer to the Wolverine, the humble Attack Buggy is only really useful in a scouting role.

Attack Cycle

Prerequisite: War Factory
Range: Short
Primary Weapon: Missile Launcher
Secondary Weapon: N/A
Speed: Fast

Description – Faster than the Attack Buggy and less well armoured, the Attack Cycle is armed with missiles that make it more effective against vehicles.

Tick Tank

Prerequisite: War Factory
Range: Medium
Primary Weapon: Cannon
Secondary Weapon: N/A
Speed: Medium

Description – Nod's answer to the Titan the ability to burrow into the ground really doesn't compensate adequately for the Titan's ability to 'Q move'. Tick Tanks are an average unit mainly suited to defensive duties.

Artillery

Prerequisite: War Factory, Radar
Range: Long
Primary Weapon: Artillery shell
Secondary Weapon: N/A
Speed: Medium

Description – New players love to use Artillery but often forget their uses as an offensive unit also. Nod Artillery are actually less powerful in the Firestorm expansion pack, but still deliver an effective attack especially when massed in numbers. Good against infantry attacks and Titans when they are at long range try to keep your Artillery away from close range confrontations.
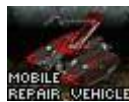
Mobile Repair Vehicle

Prerequisite: War Factory
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – A very useful unit in multiplayer games. In contrast with the GDI service depot, the Mobile Repair Vehicle doesn't cost any resources to repair units once it has been purchased. As such you should think of your allies and try and include a repair vehicle in your plans to repair allied Disruptors, Carryalls and MKs if at all possible. Placing this unit in guard mode will enable it to automatically repair any vehicles in its immediate vicinity.

Stealth Tank

Prerequisite: War Factory, Tech Centre
Range: Medium
Primary Weapon: Dragon Missiles
Secondary Weapon: N/A
Speed: Slow-Medium

Description – Expensive, time consuming to build and fairly ineffective, the Stealth Tank is rarely used in competitive play.

Subterranean APC

Prerequisite: War Factory, Tech Centre
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – Nod's most useful unit, the Subterranean APC (sub) is useful for Engineer rushes and transporting Cyborg Commandos round the battlefield. Though it has weak armour and is fairly slow compared to the GDI Carryall, the Subterranean APC is nonetheless an important weapon in the Nod arsenal. Be warned that there is a slight delay to duck underground so you should take this into account when trying to control your Subterranean APC closely.

Devil's Tongue

Prerequisite: War Factory, Tech Centre
Range: Short
Primary Weapon: Fireball Launcher
Secondary Weapon: N/A
Speed: Medium

Description – Perhaps best described as something of a 'glass cannon', weak armour renders the Devil's Tongue unusually vulnerable to massed infantry. Use this unit with extreme care.

Cyborg Reaper *(Firestorm Unit)*

Prerequisite: War Factory, Tech Centre
Range: Medium
Primary Weapon: Multi Missile
Secondary Weapon: Web
Speed: Medium

Description – A good unit that helps redress the Nod/GDI balance in the Firestorm expansion pack, the Nod Reaper has a good regeneration rate in Tiberium fields and an anti-infantry net that makes it very good against infantry units. But be warned: the Reaper's multi-missile weapon system is notoriously inaccurate and so Reapers should never be used in large numbers in a base defence role.

Mobile Stealth Generator *(Firestorm Unit)*

Prerequisite: War Factory, Stealth Gen
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – Quite expensive and at the very top of the tech tree, Mobile Stealth Generators can be useful in that they don't drain your power reserves, however their radius of effect is rather small.

Harpy

Prerequisite: Helipad
Range: N/A
Primary Weapon: Chain Gun
Secondary Weapon: N/A
Speed: Slow

Description – Good at picking out disc throwers in an infantry rush and for cross-scouting across shroud, Harpies are a more anti-infantry focused fighter than the GDI Orca.

Banshee

Prerequisite: Helipad, Tech Centre
Range: N/A
Primary Weapon: Plasma Gun
Secondary Weapon: N/A
Speed: Fast

Description – Fast and precise, the Banshee is the plane of choice for attacking main buildings. Four Banshees in three runs can take out any main building and ten can take out a main building in a single run. Banshees are also good in an anti-Disruptor role though lack the explosive, indiscriminate bombs of a GDI Bomber for taking out massed groups of infantry or Titans.

Shared Units

Harvester

Prerequisite: War Factory
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Slow

Description – Critical to the financial success of both sides, Harvesters should be controlled closely in order to maximise in-game economy. Always make sure Harvesters are collecting the closest Tiberium to your base and have not gone 'wandering off' as they are sometimes want to do.

Mobile Construction Vehicle

Prerequisite: War Factory, Tech Centre
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Slow

Description – Included for completeness' sake, a spare MCV is often vital in long games and it is a good idea to pay attention to the areas your opponent has scouted in and around your base so you can keep your spare well out of sight.

Limpet Drone *(Firestorm Unit)*

Prerequisite: War Factory, Radar
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – Fairly redundant as a unit in online play, the Limpet Drone is rarely used by human players as there are other more effective methods of scouting a base.

Mobile War Factory Factory/Fist of Nod (Firestorm Unit)

Prerequisite: War Factory, Tech Centre
Range: N/A
Primary Weapon: N/A
Secondary Weapon: N/A
Speed: Medium

Description – In long game situations it is often useful to have a spare War Factory in the form of a mobile War Factory Factory/fist of Nod. It can be used to good effect as an aggressive unit, deploying near an enemy base to build vehicle units to put pressure on an opponent. However be warned that buildings cannot be built off of a deployed mobile War Factory so such forward bases are often very exposed.

4. The Basics – Scouting

Scouting is possibly the most important thing you can do on TS. Failing to scout properly will almost certainly lose you the game and at worst will certainly mean you don't win the game. Remember – if you can't see your enemy then you can't attack effectively and you can't react to whatever your opponent is doing.

At the start of the game, deploy your MCV, build a Power Plant, a Barracks, and then a Refinery (remembering to *always* make your Barracks before your first Refinery). Light Infantry are a cheap unit, and are good for early scouting. Scout as much of your base and surrounding area as possible in the early game so you don't get any nasty surprises later on and to help you later in the game when you come to expand. Knowing the map here helps too as you will know where to send men to scout most effectively, but even if you don't know the map, scouting to all four corners is always useful.

See-Observe-React

While you're scouting your base and its surrounds, you should also be scouting out your enemy. If your opponent is any good he or she will try and kill your scouts. This is to be expected and should not deter you from trying to scout as much of the area around your opponent's base as possible even if you can't actually see the base itself as everything you scout early on will help you and your allies later in the game.

What if infantry aren't enough?

Nod Cyborgs can be effective, but only in certain circumstances. In general they are slow and expensive and easily stopped if your opponent expects them. They should not be considered your first choice for scouting your opponent unless you really know what you're doing. If you are GDI then the obvious next choice is to use a JJ. These are very good at scouting but you should remember to land your JJs as your allies can only see what you scout with them when they have landed. If SAMs stop you getting too close to a base the best tactic here is to try and land away from the base and then walk in on foot.

The main remaining methods of scouting fall under the broad categories of APCs, planes and fast vehicles. If rivers or such like block your infantry, filling a GDI APC with men and sending it over the river is good as it can be deployed on the other side to release its cargo and then used as an effective scout itself. The Nod Subterranean APC can also be used in a similar fashion though the fact it comes higher up the tech tree means you will be slower in scouting with this method.

Planes are another good method for scouting and the main way these can be used is to send a plane across shroud between two points you have already scouted. This is good if you have scouted either side of your opponent as you can now cross scout them with a plane. Remember planes cannot fly directly into shroud, so be sure that you have scouted both sides of the area you want to scout. If your opponent has SAMs then scouting the remaining base with the same plane will be hard but you should have revealed enough to see what you need, or at least see a spot where you can launch an attack.

Finally a short mention should be made of fast vehicles. Attack Cycles are good, but have weak armour. Attack Buggies and Wolverines have slightly better armour, but are also slightly slower. Fast vehicles can be used in certain situations, but in most competitive games you won't see a single unit of this type put to use.

5. The Basics – Attack

In games of Tiberian Sun your opponent is rendered effectively dead once you have destroyed all unit producing buildings with the addition of any MCVs they may have. By destroying all of your opponent's Refineries you can force them into selling buildings in order to get their money supply going again.

Which building do I take first?

Assuming you have units capable of taking out a building and you have scouted sufficiently the answer to this question very much depends on the situation. It's only really with experience that you can decide for sure what building will cause your opponent the most damage. There are however a few things you should consider:

1. Is your opponent teched? If not then you might like to consider taking the MCV first depending on your opponent's economy.

2. If your opponent *is* teched then you should consider taking the War Factory first as this will slow them on two fronts. Firstly they won't be able to build units such as Disruptors to attack you with, but also means they have to rebuild not only a War Factory but also a Tech Centre.

These aren't the only things you should bear in mind though. If for instance you are under constant pressure from Titans then taking out the War Factory or a Refinery is much preferable to taking the MCV just to relieve yourself of some pressure while you recover and prepare for the next wave. Taking Refineries is often a safe bet if your opponent's MCV and War Factory are well defended. If your opponent has 1-Reffed then you can take any of the three to good effect. Remember also the benefit of taking out Helipads (to stop the construction of Bombers, Carryalls, or Banshees) and Barracks – especially if your opponent has sold their Temple of Nod. Anything that slows your opponent is a good thing, but think carefully before committing your attack.

Which attack will do the most damage?

In long games an additional area you can consider attacking is power. If your opponent has stealth/firestorm/ SAMs/EMP, taking out power can seriously disrupt their defensive capabilities and enable you to then move in to take main buildings such as MCVs and War Factories. Because by this stage both you and your opponent will be well defended, another common tactic is to take out Harvesters. This can be effective for a number of different reasons. Firstly, and most obviously, it means your opponent has fewer Harvesters, which means less money. Secondly, it means you are able to draw defensive units out of your opponent's base opening up opportunities for launching separate attacks to weaker areas or just forcing your opponent to buy more defensive units and thus spend less on attacking you.

6. The Basics – Defence

Equally as important as attack is defence. Obviously if you go all-out attack against your opponent you are going to be weaker in defence, and as such you should be adequately equipped to defend with however much or little you have. Over the years many bases packed with SAMs and RPGs have been overcome by a few well-placed Disruptors and equally a few sneaky Disruptors have been overcome with as little as a few infantry and a couple of Lasers.

Remember: it's not how much defence you have, it's how you use it.

EMP

It's at this point that we must seriously consider the uses of EMP. The EMP cannon is very useful against vehicles and cyborg units. It's especially good against Titan rushes or that unexpected Disruptor attack to the undefended corner of your base. The downside of course is that an EMP cannon uses up a lot of power, is slow to charge and is also slow to fire. Placing an EMP cannon where your opponent can't see it or where they can't attack it is a very useful option; as is making a spare that's hidden out of the way just in case your first one gets destroyed. Obviously you have to weigh up the benefits of having EMP defence over the drawbacks on power and your money management. It's also useful to have a rough idea of the radius of the EMP cannon's effects. If you know your enemy is attacking with a Titan rush, always try and move your units out of the cannon's radius when firing so you have as many of your own units available to destroy Titans and/or defend the follow-up attack. It is common practice amongst the better GDI players to combine Titan rushes with Disruptor drops and so lure you into using your EMP and committing defensive units. Do not be fooled.

SAMs and SAM placement

SAMs are useful, but too many SAMs can be a hindrance for similar reasons to an EMP cannon in terms of power drain (if Nod) but also because many players will try and use SAMs to their advantage and force their dying planes to crash into a damaged building. If you see a player trying to do this to you the solution is to turn off your SAMs (using the power function) and repair the buildings in question. When the planes go to leave turn on your SAMs as quickly as possible and you should take out the suicide planes before they make their escape.

This issue aside, a few SAMs are always useful. If an enemy MK lands in your base it will invariably try to take out the SAMs first as with no SAMs the controlling player is free to lift his or her MK around your base at will. Placing SAMs so as to cover yourself and/or your allies from JJ infantry scout is also extremely important on the larger maps such as Forest Fires, as scouting is one of the most important things that can win or lose you the game. If your team are all open to the enemy then that means they are all open to attack. Clearly, you want to avoid being attacked if at all possible. Killing scouts is therefore very important, and SAMs can help do this where JJs are concerned.

When considering SAM placement bunching SAMs together in one area of your base is never really a good idea as it means their field of fire is very limited. Remember you can be attacked from *all sides* and if your opponent sees yours SAMs concentrated in one particular area then they will just fly around your SAMs and thus render them useless. If your SAMs are useless then there was no point in buying them in the first place!

Engineers

Engineers are an important unit. If you see your enemy has more than three Banshees you should always have at least one in your base at any one time – more if possible. If resources are limited then you need to consider which of your buildings is most important to guard with the one or two Engineers at your disposal. If you are teched it may seem preferably to save your War Factory over your MCV as it means you can still attack. Obviously this is all very situation dependant, but the same sort of thinking that goes into attack needs to go into defence.

Defending against Banshees

Ten Nod Banshees can destroy a main building in a single attack run. A good trick to defend against ten Banshees is to have your main buildings with one bar of health removed so that you can send in an Engineer just at the right moment to save the building. Of course you will need a few spare Engineers to save the building on the second and third run, but with a bit of practise and some good timing, Engineers can save you from defeat.

Prioritising targets

Prioritising what to defend becomes more important when you have a more spread out base or when you get attacked from multiple directions possibly by multiple players. In cases such as these you need to know what is the most important thing to defend and what is most likely to succeed. If you have an EMP cannon you might consider EMPing one prong of the enemy attack and using your units on the attackers that are still functional. Remember that if you EMP a Disruptor it will keep on firing to the end of its cycle so if it was placed to 1-shot kill a Refinery you will still need to be quick to send an Engineer in or sell the building before it dies. With more experience, prioritising defence should become second nature.

Building management

It's surprising how little this is done or thought about by some players, but if you are under attack, *stop building*. If you then lose your Refineries you should still have some money left but equally it means you can build that vital Engineer, that vital Laser or even if you're really good, build a Silo or something similar to glitch a Carryall landing. As soon as you know you're going to come under attack you should stop building unless you have nearly finished a crucial building. If you are ¾ through building a Tech Centre this is possibly one of the few exceptions to the rule, especially if your MCV is the building under attack. In this situation, place the Tech Centre as quickly as possible and sell if need be.

Selling

Selling can be quite a skill when under attack. Selling at the right moment means you get some money back from the building and so make the best of a bad situation. However the trick is all in the timing. Sell too early and your opponent can attack another building; sell too late and you won't recoup your losses. Don't sell unless you have to, but if you do, try and time it right so that your opponent wastes their attack.

Defending against Engineer rushes

If you are playing a Nod opponent then you should *expect* an Engineer rush so it is a good idea to gather infantry round your most important buildings. Some GDI players like to have a Bomber or two on a waypoint guard system. Obviously an MSA is also crucial against Nod so you can see where the attack is coming. Lasers can be quite good at defending against Engineers though you must take into account their drain on power reserves. GDI of course have the advantage of having disc throwers that are great for taking out lightly armoured Engineers and a few of these scattered in with your Light Infantry greatly enhance your chances of beating an Engineer rush. Obviously, if you see a Subterranean APC suddenly pop up in your base you should always be sure to control your defences into attacking the Engineers and not the APC.

7. Ten tips to become a better player

1. Scout.

The more you can see, the more you can react to. You can't attack your opponent if you can't see them, and if you try you'll often end up failing. In large multiplayer games scouting is key. If you don't scout you won't win. It's as simple as that.

2. Observe.

It's all well and good scouting, but if you don't actually *see* what it is you've uncovered and react to what you see then you're going to struggle. You shouldn't ever have a quiet moment in a game of TS when your buildings are building and all your units have orders as you should be checking the map for incoming attacks and watching out both for yourself and for your allies. If you see something – react to it.

3. Money management.

If you don't have any money then you can't attack or defend effectively. If you manage your money well then you're on the road to success. Watch out for Harvesters going for Tiberium fields that they shouldn't be and make sure you have enough Refineries and Harvesters to supply your style of play.

4. Speed.

As your building is in the process of being built, think about where you're going to place it and think about what you need to build next. At the split second it is completed click to place it instantly and click to build the next building straight away. Any time gained by being faster than your opponent means you can attack that little bit faster. Speed is a basic prerequisite for being a good player.

5. Have a plan.

Whether you choose to plan and act out a specific build order or prefer to take a more reactive approach to play you should always have a plan as to where your build order is going to take you and how you plan to attack. Spamming Artillery is not considered a plan.

6. Know your enemy.

On a basic level, this means knowing whether your opponent is Nod or GDI and reacting to this with appropriate defence. Here, you should clearly know to make an MSA against Nod or Disruptor defence against GDI. On a more complex level this means scouting your enemy, observing your enemy and knowing what your enemy is doing. If you know your enemy is going to 1-Ref you then get defence as quickly as possible. If you know your enemy is going to go mass planes then take out sources of money, take out Helipads etc. Remember, See-Observe-React.

7. Know your allies.

As above, it's often a good idea to know whether your ally is Nod or GDI for the simple fact you can choose a strategy that supports them. Communication is key, but so is observation. Again, scout your enemy, observe your enemy and react to what your enemy does. If they are attacking your ally then you should consider either helping your ally (if they need it) or counter attacking against a now under-defended opponent. You should always aim to ally as quickly as possible so that you can both see what each other scout.

8. Know the map.

A simple concept but one that some players simply don't follow. The best example is if you are top middle or top left on Forest Fires then you must get the top middle bridge as soon as you can produce men. If you do not then not only will your allies get annoyed but your team will also get scouted. On a more advanced level, on whatever map you are playing you should look out for where to expand to and the areas that are important to control in the long game.

9. Expand.

Expanding is central to playing (and winning) the long game. If you can't expand then you will lose. There's no way of getting around it – expanding is a skill you must learn and a skill you must master.

10. Teamwork.

Communication, communication, communication. Warn your allies if they are about to come under attack. Support your allies if they need it. Watch your opponents and see what they are doing. Strike where your enemy is weakest and work closely with your allies. With successful teamwork, two 'lesser' players can beat two 'better' players easily. No teamwork

and you are essentially fighting as individuals. Remember a team can be greater than the sum of its parts.

8. Examples Class

Here follows a series of example screenshots of Nod and GDI bases built to differing standards. Included with each are points as to mistakes, things to improve on and general hints and tips.

Example 1 – a poor Nod base

In this example the player has bad money management, has made no clear attempt at putting together an attack and has failed to react to multiple enemies in his base.

1. **Refinery placement**. The Refinery has been placed a long way away from the Tiberium field. This means the Harvester has to travel a long way in order to deposit its Tiberium. Badly placed Refineries can ruin a player's economy. Note also that in this example there is only one Harvester. You should always aim to have *at least* two Harvesters per Refinery.

2. **Cyborgs.** Cyborgs are an expensive and ineffective unit choice.

3. **Player not reacting to danger in base.** Here the base is clearly under attack from a group of hover MLRS but the few units the player does have haven't been moved to attack them. See also point 7 where previously built Artillery units have been destroyed by the same group of MLRS.

4. **Scouting.** Though some attempt has been made at scouting, a lot is still left to be uncovered. In long games this could mean an opponent makes a hidden base. In the shorter term this means you are incapable of seeing what your opponent is doing or see where you will launch your next attack.

5. **Building Tech Centre while under attack.** This is forgivable but given the fact neither the War Factory or MCV is directly threatened yet by the MLRS group and money is extremely lacking, cancelling the Tech Centre to free up some money for some infantry or perhaps a Laser or two could save you having to rebuild later on. Note also, point 6.

6. **Harassing Jump Jet Infantry.** The controlling player has failed to react to the harassing JJs and is therefore losing money in order to repair his MCV.

7. **Destroyed Artillery.** Placing Artillery where they can be attacked at close range is a bad idea as they cannot themselves fire back. Here the controlling player has made Artillery in the hope that they will be adequate defence. The hover MLRS have easily dispatched them. Note also the fact the Artillery have been placed at the front of the base. Your opponent will rarely attack the front of your base.

Example 2 – a better Nod base

In this example the controlling player has far better money management than the previous case though still has not scouted adequately enough. Even if you can see somewhere you are able to attack as in this picture (bottom middle's base is exposed), it is good practise to reveal as much of the map as possible to get the all-round 'big picture'. Note this base was built *faster* than the base in example 1.

1. **Refinery placement and money management.** Note how the Refineries are placed as close to the Tiberium fields as possible and the Harvesters are harvesting the closest Tiberium to the base. This is called Harvester control and is a skill that should be worked on in order to maximise your economy. Note also the minimum standard of two Harvesters to a Refinery has been applied.

2. **Anti-scout SAM**. Because in this example the player's base is in the corner, JJs can only approach from a few directions. Here a SAM has been placed to cover JJ approaches from the north and the east (SAM out of shot to the right of the Hand of Nod).

3. **Sold Tech Centre**. It is common practise to sell the Tech Centre once it has been purchased as it serves no other function other than to drain vital power reserves. Once you have a Helipad and a War Factory the Tech Centre should always be sold.

4. **Deployed MSA**. There are Nod opponents in the game, therefore an MSA is vital.

5. **Engineer near MCV and War Factory**. The Engineer is in a good position to cover both the MCV and War Factory. Make sure when you are attacked that you move your Engineers away from Disruptor beams so they don't die before they can save your building.

6. **Engineer rush ready to go into Subterranean APC**. Only three Engineers are needed to take a main building but here the controlling player has four ready. Note they are grouped for ease of control using the CTRL 1-9 function to create units.

Example 3 – a poor GDI base

In this example the controlling player has very poor defence placement.

1. **Defence units concentrated at front of base.** There are a number of mistakes here.
    The first and most important mistake here is concentrating defences in one area
    leaving the rest of the base vulnerable. What the controlling player fails to realise is
    that attacks don't just come from the front, and just because he is not scouted this
    does not mean his opponent will not attack – it just makes it more difficult.

2. **Pavement.** It is never a good idea to assume that just because you have Pavement
    you will be safe from an underground attack. In this case it seems as if the Pavement
    has given the player a false sense of security. Though Pavement can be useful in
    certain situations, Infantry and Bombers are a GDI player's best defence against
    Engineer rushes.

3. **Bad SAM and RPG placement.** As with point 1, the RPGs the SAMs in this example
    are all concentrated towards the front of the base.

4. **Three Barracks.** It is important to note that Tiberian Sun does not work in the same
    way as the Red Alert games. Building more Barracks will not speed up infantry
    production.

5. **Low power.** The controlling player has extremely poor power management. Being in a low power state will both slow your building speed and damage your buildings over time.

6. **Tech Centre.** There is no reason to keep the Tech Centre in this example. It should be sold.

7. **Isolated, undefended War Factory.** Due to the mistakes outlined particularly in points 1 and 3, the War Factory here is way too isolated due in part to a spread out base and the controlling player's poor defence placement. What's the point in spending all that money on defence if your opponent is just going to go past it?

8. **Too much money.** Ideally all resources should be allocated as soon as possible in order to maximise efficiency. Having over 4k in resources at this point suggests that the player is not playing to their maximum potential.

Example 4 – a better GDI base

A better base than the above example with just a single Titan and an RPG alone this base is better defended than example 3 with all its Titans, Wolverines and RPGs.

1. **Disruptors loaded and ready to go.** Attacking is the key to winning.

2. **Better defence placement.** Place defences where they have the best arc of fire so they can be effective in as many directions as possible. If you can, make defences with overlapping arcs of fire. Note here also the fact that by buying a Component Tower the SAM Radar tech for GDI has been kept even though the Radar here has been sold.

3. **Good money management.** See how the Refineries are close to the Tiberium and the Harvesters obey the 'two to a Refinery minimum' rule. See also how the Harvester in the top right of the screen could be controlled to harvest Tiberium closer to the Refineries. This is an area for improvement.

4. **Well laid out base.** Buildings aren't too close though are close enough to be easily defensible. Different players will have different preferences on base layouts but this shows a tighter, more effective layout than that in example 3.

5. **Power management.** In this example the controlling player is not at low power, though is quite near to the mark for going low power. Though this is perfectly acceptable in this given game situation, if the controlling player wanted to make an EMP cannon for example it is advisable to have more power than is necessary so that you don't risk power downs when your opponent starts to try and take out your Power Plants.

9. Advanced Tactics

To become a better Tiberian Sun player, first and foremost you need to have a willingness to learn. Just because you've always done something in a certain way, doesn't necessarily make it right. Experience is also key. Gain respect and play Westwood maps as much as possible to improve your all-round game. The next step is to play better players that challenge you and if possible watch some of the top players play and see what they do in certain situations. Playing with better players will make *you* a better player. Essentially the skills that differentiate a veteran mod-map player from a veteran Westwood player are scouting, observation, expansion, money management and control. Here follows a collection of some of the more common advanced tactics that separate the better players from the rest.

GDI

1-shot Disruptor on Refinery/War Factory

Fairly straightforward and easy to learn, 1-shotting a Refinery or War Factory with a Disruptor involves moving next to the proposed building and force firing (CTRL button) across the building as shown in the diagram. If you do this correctly this should work 100% of the time on Refineries and War Factory Factories unless the Disruptor gets killed or the building is saved by an Engineer. Note also that if done correctly even an EMP cannon cannot

stop this from working if the Disruptor gets its shot away before the EMP blast lands as even though the Disruptor will be EMPed, it will continue with its current shot.

In this second example, the Disruptor has been landed in the only spot it can land to 1-shot an MCV. If the MCV is at full health then this will leave it with 1 bar of health left, but if is lacking in more than one bar, this should work. Note here the Engineer in the diagram has a chance of saving the MCV if the controlling player is very quick, though this will not save the MCV from the Disruptor's second and third shots.

Power bombing and additional notes on Bombers

Power bombing is the grouping of Bombers so that they destroy a building in one pass with explosive effect. When done correctly power bombing makes the building un-saveable by Engineers. A good way to group your Bombers appropriately is to run at line-astern parallel to the building being attacked then when at right angles to the building, turn towards it so your Bombers are grouped closely for maximum effect. The drawback of power bombing in this way is that it can often force units to appear on top of each other and if one such grouped Bomber is damaged by a SAM the damage applies to the other Bombers under it to similar effect. In the example screenshot the attacking player is about to take the Refinery in one pass with the required 5 Bombers. To power bomb you need 5+ Bombers and to get the explosive effect it is recommended you use more Bombers than is necessary to normally take the building in order to make the building un-saveable by Engineers.

You should always be aware when using Bombers of their area of effect and the fact that they bomb in a straight line. When using Bombers defensively you should control them to approach a column of units from the front of their direction of travel so as to maximise the amount of units caught under the bombs. Attacking a column from the side is a waste of your Bomber's potential and could well result in the survival of more units to attack your base.

As an additional note, 3 Bombers flying line astern can take out a Refinery in two runs as shown in the second example screenshot.

Q moving

Possibly the most important skill to master for the GDI player, Q moving and the use of the Q button is critical to the effective use of Titans and Disruptors. To Q move, target enemy units as normal and then while holding the Q button order the direction you want your unit to move in. Be sure to work on your timing as some players have been known to Q move Disruptors too fast and so fail to get their shot away quickly enough. Disruptors require a slightly longer pause in order to wait for them to start firing before Q moving can work, but if done properly this tactic means you can avoid defensive units and give you the time needed to kill the building and pick up the Disruptor again or alternatively target a second building. With Titans you are able to increase their effectiveness by Q moving over infantry and/or Engineers while targeting units or buildings with their cannons which makes them doubly useful.

Component Towers and placement theory

As a GDI player, if you plan to sell your Radar you should always make at least one Component Tower so as to keep the SAM tech once the Radar is sold. You do not necessarily have to fill the Component Tower with a weapon but you should place it all the same in a place where it can be used effectively in defence. This should normally be in a spot you would plan to place an RPG in unless of course you need to place a SAM quickly in a position to stop an incoming JJ. Placing these empty Component Towers around your base means you can respond to attacks as they come without having to waste valuable resources and time on building the defences before you need them.

In terms of specific placement, RPGs should have an arc of fire that will cover as much of your base as possible and overlap with other similar defences. You should also think about how you are placing the Towers themselves as well as things like Power Plants, Barracks, Radar, as with a little thought you can cover many of the 1-shot Disruptor spots to limit an attacking GDI player's options and increase your defensive integrity. Against Nod you don't need to worry about covering 1-shot spots, though the same sort of overlapping principle applies to Component Tower placement.

In this first example, you can see that all three Component Towers cover each other and clever placement of the War Factory around the dip in the terrain means that an attacking Disruptor is very limited in spots it can land in to try and 1-shot it. The Barracks, Power Plant and Component Tower placement all add to the defensive integrity of this base.

In the second example over the page we see the pink player reacting to the Disruptor by placing an RPG in the previously empty Component Tower so that it can attack the Disruptor with the Titan. Use of an Engineer here can save the building. The placement of the War Factory itself is clever in that it makes the War Factory as defensible as possible with good placement of the Barracks and power to limit the spots where a Disruptor can land. Though clearly this does not prevent a longer range Disruptor attack, it does mean the pink player is less likely to die to a 1-shot. Note also in the screenshot the placement of the second Component Tower within the RPG's range of fire to the right hand side of the MCV 1-shot spot.

3 Titan defence against 1-shot Disruptor attack

A highly advanced tactic, it is actually possible to stop a Disruptor 1-shotting a Refinery or War Factory with just 3 Titans. In order to work the building needs to be at 100% full health, as if successful the building will be left with just 1 bar of health.

In order to kill the Disruptor you need to see it coming and force fire (CTRL button) the Titans on the Carryall while it is still in the air. As soon as the Carryall lands the Titans will shoot it and the loaded Disruptor causing the Disruptor extra damage over that it would normally receive. You then need to change your force fire priority to the Disruptor and if successful you should save the building just in time remembering to repair it as soon as the Disruptor dies. This tactic actually works better in slower games as in play testing if the game is particularly fast it's very hard to target the Carryall while it's in the air, and mis-clicking can often lead to the Titans moving away. This tactic is for experts only.

Nod

1-shot Multi-missile tutorial

Quite a difficult skill to master, 1-shotting an MCV with a Multi-missile is the hardest of the main buildings to kill with a missile and can actually be done in a number of ways but the most successful is as follows. Firstly, place the missile cursor over the MCV as shown in the screenshot with the gold MCV. Now you must time your shot so one of the four pointers of the cursor are facing towards your Missile Silo (making sure to estimate where the cursor will be when you let up off the mouse button).

Another way of taking an MCV 1-shot is as shown with the orange MCV, though this method seems approximately only 70% successful and works better if your opponent has low power or at least a bar of health off the MCV. Method 2 is a little easier to line up and there is no timing element involved but is obviously less successful so it is advised you work on the first method or at the very least, support your missile shot with accompanying Banshees and/or CC.

Notes on Banshees

You can kill a Refinery with just 3 Banshees taking three runs or you can kill a War Factory or MCV with 4 Banshees in three runs. To kill a main building in just a single run, you therefore need 10 Banshees (9 for a Refinery). Obviously if your opponent has Engineers then taking all three runs to kill a building will mean your opponent can save his/her building. In such a case you can either choose to force your opponent into wasting Engineers, you can attack ready built Disruptors and the like, or you can choose to attack a different opponent. Remember though that if you choose to send out your 4 Banshees that you should look out for any imminent incoming attacks *first* just in case you would be better off using your Banshees in defence. Notes that Banshees are good against Disruptors and MKs so don't forget to use them if you are under attack!

Notes on Engineer rushes

It only takes 3 Engineers to take out a main building such as an MCV but some players prefer to send 4 just in case or in the case of a combined Engineer and CC attack, use the 4th Engineer to repair the stolen building. Some prefer to fill their Subterranean APC with 3 Engineers plus 2 Light Infantry to distract their opponent's defensive units and/or to scout additional areas of their opponent's base. All this of course is a matter of personal preference – whatever works for you. Though it may seem obvious to many players, it is always a good idea to group your Engineers and your Subterranean APC (using CTRL+number function) to get your Engineers into a building as quickly as possible. Grouping units in this way is common practise among the better players.

"Sub ducking"

Sub ducking involves controlling your Subterranean APC so that it only pops up for a fraction of a second before going back underground and advancing into the shroud little by little. This tactic can be quite good for surprising an opponent by attacking from an unexpected direction such as up past a cliff, but is made less effective if your opponent is aware of the Subterranean APC.
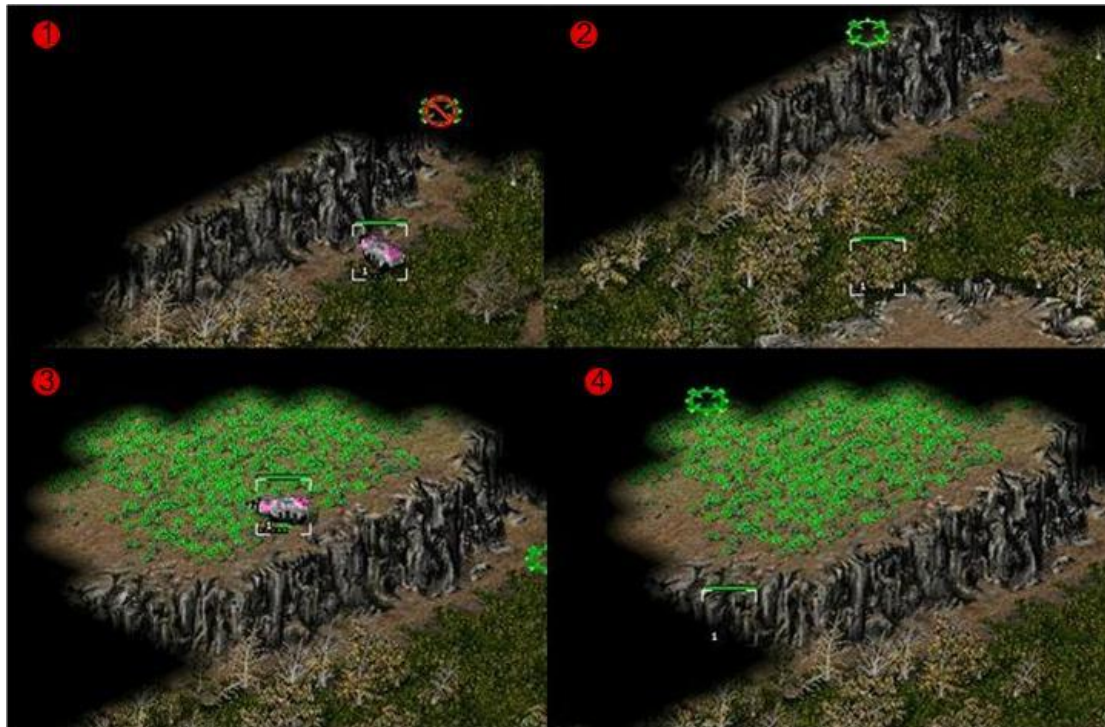
1. Subterranean APC at edge of cliff/shroud.

2. Send the Subterranean APC to the very edge of the shroud where you can see the green cursor indicates movement is allowed.

3. As soon as the Subterranean APC starts heading up to surface either click a good distance away (to force the Subterranean APC back down), or click somewhere well away on the Radar. Because of the cliff in this example the controlling player can just click back down to the bottom of the cliff.

4. As the Subterranean APC ducks back down click to move into the very edge of the shroud and repeat as necessary.

The S button

Similar to crossing a base with a plane, you can cross a base with a Subterranean APC and use the S button to bring the Subterranean APC up at your desired location. Naturally a lot of guesswork is involved in getting it to come up in the right place but if you know the map well (Forest Fires for example) with some practise you can get quite good at timing your emergence in just the right place.

Note that you should always be prepared to quickly duck down again should you come up away from your opponent's base and be targeted by base defences. In this situation you can use the Subterranean APC ducking method described above to scout further into the base, or if your Subterranean APC is badly damaged, should consider taking it back to your base for repairs. In the following example screenshot the controlling player has scouted the top left and bottom left corners of the map (as well as a bit in-between though this is not necessary for the purpose of this example) and has brought the Subterranean APC up to the top left position and sent it to bottom left. Good timing and judgement by the controlling player means the Subterranean APC has come up right behind the undefended War Factory. This won't always happen so be prepared to duck back down again.

Hijacker bombing

An interesting if expensive tactic, Hijacker bombing works on maps with blue Tiberium and involves the attacking player stealing an opponent's Harvesters and using them to destroy enemy buildings and hurt an opponent's economy. If done well (and if the Hijacker survives the blast and the attacks of any defensive units) a chain of successive Harvester bombs can be made and the Hijacker will more than pay for itself credits-wise.

When picking a Harvester to steal it is often a good idea to take one which is nearly full and ready to return to the Refinery as this means there is less chance the Harvester will die before it can fill up and attack your opponent. Harvesters waiting behind Refineries are often the best ones to steal.

The example screenshot shows Harvester bombing in action – in this case taking out two Refineries with just one bomb and then stealing a second Harvester. Not a bad return for the cost.

1.   Use a Subterranean APC to sneak a Hijacker into your opponent's base and steal a Harvester.

2.   Place Harvester where it will do maximum damage.

3.   When the Harvester explodes be quick to control the Hijacker away from defences ready to capture a new Harvester.

Shared

Important buttons and Q scouting

Four of the most important buttons used in-game are Q, S, X and G. Q is used for Q-scouting and Q-moving, S is for stop, X is for scatter and G is for guard. S, G and X shall be considered in more depth in the next topic so for now we shall concentrate on the Q button.

To Q scout, simply click normally to send a unit to a location on the map, hold Q and then click on another area and so on to chain a series of moves together.

Infantry control/man rush techniques

Infantry battles can be quite important on open maps such as Terrace and in certain spots on Forest Fires. It's a good idea to get used to using the S and G buttons and remembering that X is scatter when your opponent tries to squash your men with Harvesters, Titans and other vehicles. The key to these early game battles is to make sure all your men are firing and not running to shoot a target out of range and so exposing themselves to enemy fire. In order to improve your general infantry control there are a number of points you should bear in mind that will help you improve.

- Remember up hill is better than downhill in an infantry battle.

- Don't allow yourself to get bottlenecked.

- Grouping separate parts of your rush can be useful, especially if you are trying to control Disc Throwers.

- Disc Throwers can force fire their discs, causing them to bounce off the ground and so increase their range.

- Try to keep your Disc Throwers at the back of your infantry group out of harm's way. If you see 1 Disc Thrower at red health then move him out of the pack so as to try and avoid him killing other Disc Throwers.

- Keep your infantry tightly packed so as the ones at the back are shooting as well as the ones at the front. Spread out infantry will often die to a more concentrated, organised opponent.

- When fighting against Disc Throwers try and split your infantry to target the Disc Throwers as Disc Throwers can easily be the difference between success and failure in an infantry battle. If used properly they can be worth 3-4 Light Infantry.

- It doesn't take 35 infantry to kill 1, so don't manually target with the entire group.

EMP

The EMP cannon can be an extremely powerful tool in the right hands and can even be used offensively to EMP drop an opponent and knock out base defences before you send in an attack.

The main trick when dealing with EMP and using it effectively is to take into account the delay in firing. Against slower moving targets such as Titans this is fairly straight forward as the only thing you need to take into account really is the radius of the blast and trying to cover as many of the attacking Titans as possible. Against laden Carryalls however this can be a bit trickier as you must also judge where your opponent is going to land and if he lands his units at opposite sides of your base, which unit you will EMP and which you will attack with your defensive units. In order to effectively EMP a Disruptor before the attacking player has time to shoot with it you need to fire as the unit is landing. This can be very dangerous if the attacking player suddenly decides to fly his Carryall to a different part of your base so you should be very careful. Even the best players can sometimes be fooled.

As has been suggested, there is often an inherent risk in shooting an EMP cannon because of this inbuilt delay in the cannon firing as it can sometimes mean that you will misjudge your shot and end up just EMPing yourself and not your opponent. You should always be aware that an EMP blast will not affect planes that are in the air so you can save your planes from an EMP blast by simply lifting them into the air, but note also that your opponent has the ability to do this also and so if you are the attacking player in this instance, keep your Carryalls in the air away from any incoming EMP blast if you are unsure if your opponent's cannon is charged or not. Be aware also that if you EMP a Subterranean APC you will very often not EMP the units enclosed within so if it has a CC in it, beware.

If your opponent is aware of your EMP cannon capabilities it is often an idea to have a second cannon just in case the first is taken out in prelude to an attack. If your opponent is *not* aware of your EMP capabilities it's a good idea not to let them know, so keep it hidden in a place you know they haven't scouted so that they are drawn into attacking what they think is an exposed base only to find their expensive units get EMPed. Remember – think smart.

Glitching (the fair way)

Shown here is the three stage guide to glitching a plane the fair way. In this example the defending player has seen the Carryall approaching and in this case has built a SAM ready to place where the MK is about to land. In (1) you can see the player about to place the SAM in the shadow cast by the MK as it is about to land. In (2) the MK is forced back up into the air and the attacking player has to land it next to the placed SAM in (3). In this example the MK has not died as it has been landed quickly and has not been sent too far into the gold base. Had the same scenario occurred near say the Radar then it is likely the MK would have died after being forced back up into the air. Please note that you do not have to use a SAM specifically to glitch in this way and some players prefer to use wall sections or Tiberium Silos where the Tiberium Silo has the advantage of being larger and so capable of glitching multiple units if they are landing together. This is of course down to personal preference and the state of your economy at the time – the SAM option obviously being the most expensive though there is the advantage that the placed SAM can get out that additional extra shot that might well make the difference in whether you take down the Carryall or not. Infantry can also be used in a similar way to glitch planes fairly.

Defending against marauding units – CC, MK and MK-Disruptor combinations

Marauding units such as the MK or CC are often use to disrupt defences and pave the way for additional attacks though clearly they are both very powerful offensive units in their own right that can equally be used in a general attacking role. Defending against these units can be very difficult if the attacking player is experienced and has good control but there are some simple steps you can follow to increase your chances of survival. The first thing you should remember when under attack from either these units is that without their transports, they are much less effective than they are with them and their transports should always be

your targeting priority. In the case of the MK, as soon as you start coming under attack you really need to get a SAM. Don't place this SAM away from your main base – place the first one near the centre. Why? Because the MK will try and draw you out and pick off your defences. If you place the SAM near the centre it means the MK's flight path is limited and you can maintain better defensive integrity in your base should a secondary attack be launched. If you have a mixture of defensive units a good strategy when attacking a landed MK is to get your anti-air units (MLRS/Rocket Infantry) to attack the Carryall while you order other units to attack the MK. This has the advantage that if the attacking player tries to lift the MK then the anti-air units will continue to target it as it takes off. Once the Carryall is dispatched you can then focus your entire attentions upon taking out the MK.

Placing base defences to distract the MK away from attacking your main buildings and defensive units is also a good idea. RPGs, Lasers and such like might well die to the MK, but the health of your main buildings saved may very well prove crucial if your opponent has additional attacks lined up.

A similar sort of approach works for Subterranean APCs with CCs in, though making SAMs obviously won't work in this case. In this situation Lasers work well, though Bombers are probably the best unit for dispatching Subterranean APCs and causing collateral damage to the nearby CC as well at the same time. An MSA is crucial for defending against Subterranean APCs and an attacking player will try and take out your MSA if at all possible so that they gain the advantage of surprise. It is therefore a good idea not to leave your MSA too exposed on the edge of your base where it is easy prey for a CC. Additionally, you should be wary to watch out for units shooting the Subterranean APC while it is underground and accidentally shooting your buildings in the process. If this happens you need to stop your units firing.

The main danger you can be drawn into with either of these units – but the MK especially – is having your defensive units drawn away from your main buildings while another unit such as a Disruptor attacks you on the other side of your base. In these situations **ALWAYS** kill the Disruptor first. Disruptors kill buildings faster than MKs so you have more time to save a building against a MK than you do against a Disruptor.

In the screenshot below you can see a classic example of this case in point with the MK having been used to distract the defensive units away from the Refineries where a Disruptor has been landed to take out the gold player's economy. In this case the gold player should have noticed the Disruptor and left the MK alone for the time being, should probably make a Laser next to the Disruptor, should sell the Radar for additional men and should probably think about selling the Refinery that is about to die to a 1-shot. Note also the Banshee sitting on the Helipad doing nothing. It should be used against the Disruptor immediately. Also note that the gold player seems to lack SAMs. This is just perfect for the attacking player to take control of the situation and destroy the gold base.

Tips for combating marauding units:

- Take out the transports.

- Keep an eye out for the secondary follow up attack. Do not be lured out of your base.

- Keep Engineers well away from MKs and CCs. This means moving them away if you have to. An attacking player will always try and take out your Engineers as they are extremely useful, rather expensive and die exceptionally easily.

- Know your opponents – have an MSA if you are against Nod and/or have the necessary SAMs if you are against GDI. If a MK or Disruptor is flying about your base build a SAM as your first priority along with Engineers (if required) and additional defences.

- Don't waste your EMP cannon on the MK if there are Disruptors coming. Depending on where in your base the MK is you are better off using the EMP on the Disruptors which can cut through your base a lot quicker than the MK can.

Notes on wastage and overkill

In closely contested games every single credit counts and if there is a building you know you can safely take out with 5 Bombers, do not waste 7 or 8 on it. This principle applies to any kind of attack and in the picture to the right you can see that more Bombers than are necessary have been used on the Refinery. Being as there are no SAMs threatening to take out any of the Bombers the 'spare' Bombers could have been put to better use taking out Helipads, Power Plants, Barracks or defensive units. Being aware of your money management in the middle and later stages of the game is very important in getting ahead of your opponent in terms of economy and those additional buildings you could have taken may well come back to haunt you later on in the game. Do not overkill a building if you can help it and certainly don't waste attacks against over defended buildings when there are other, less well defended buildings available to attack.

10. Frequently asked questions

What button is it to chat in-game?

F8 to talk to all players; F1-7 to select only specific players in game.

How do I ally?

Click on a unit and press A.

What is a 'BO'?

BO stands for build order – it is the order in which you build your buildings.

What is Harvester control?

Harvester control is the process whereby you make sure your Harvesters are always collecting the closest Tiberium to your base. With practise this should become fairly second nature to you though it's always a good idea to keep an eye out for stray Harvesters and they are well known for having a mind of their own!

How do I know when it's the right time to expand?

You should be watching your Harvesters and your Tiberium supplies whenever you have a spare moment in the game. As your Tiberium patch starts to dwindle think about expanding your base using Silos and Power Plants so you can build Refineries as close to the next Tiberium patch as possible. Send Harvesters to start using this patch *before* you totally run out of Tiberium as they are slow to move and you should have a Refinery built by the time they have harvested their first load from the new patch. This is very important for the later stages of the game. Do not have multiple Harvesters on an empty patch.

What is marking and how do I do it?

Marking is the process of using waypoint markers to 'mark' a Nod player's buildings as soon as he is scouted. You do this simply by placing waypoints on top of all his main buildings. That way if they stealth you still know where all their key buildings are and can force fire onto the spot where the main building is known to be regardless of whether you can see it or not.

What is TM's job?

Asked in relation to games of Forrest Fires (FF) as a way of routing out new players, TM (top middle) is always tasked with sending infantry to the top middle bridge as soon as possible

to destroy it and stop the left side team from scouting the right. TM is one of the most important spots on FF and if done badly can lose the right side the game. If you intend on learning FF you need to learn the different jobs that the spots have and you should never, ever decide to bunker unless you are bottom middle/bottom right.

How do TL and LM ally?

Another Forest Fires question, TL (top left) and LM (left middle) ally by TL sending a unit close to the cliff that marks the edge of LM's base. From here LM can scout out that spot and ally with TL without having to send infantry the long way round to ally. LM should always remember to scout out the edge of his Tiberium field at the very start of the game so as to ally with TL.

11. Appendix

Glossary

Bar = Barracks

BL = Bottom Left

BM = Bottom Middle

BO = Build Order

Borg = Cyborg

BR = Bottom Right

CC = Cyborg Commando

Dis = Disruptor

Disc = Disc Thrower

Eng = Engineer

FF = Forest Fires

GS = Ghost Stalker

Harv = Harvester

Hover = MRLS

Inf = Infantry (could refer to any kind of infantry unit)

JJ = Jump Jet Infantry

LM = Left Middle

MK = Mammoth MK II

Modder = A player who primarily plays mod maps

Pad = Helipad

Ref = Refinery

RM = Right Middle

Rocket = Rocket Infantry

ST = Strike-Team

Sub = Subterranean APC

Tech = Tech Centre

Tez = Terrace

Tib = Tiberium

TL = Top Left

TM = Top Middle

TON = Temple of Nod

TR = Top Right

Visc = Visceroid

WW = Westwood – usually refers to either an official map, or a WW player, as in someone who likes to play official maps

Screen resolution

Most players like to try and maximise their screen resolution when playing TS so as they can see more of the game area and select from a wider range of buildings in the build options menu without the need for scrolling. Typically players will describe their resolution in terms of how many 'boxes' can be seen in the building menu to the side. For this guide the maximum default resolution the game allows has been used, and so you can see 7 boxes. Though this is the maximum default resolution the game allows for there is actually a way of improving the resolution further.

To change your resolution you need to access westwood>sun>sun.txt and find screen height and screen width. Now it is just a matter of filling in the appropriate resolution and saving the file. The various resolutions to number of boxes on screen are shown below.

Resolution	Number of boxes
800 / 600	7
1024 / 768	11
1152 / 864	13
1280 / 1024	17

1600 / 1200	21

Alternatively, copy and paste the following, inserting your preferred screen resolution:

[Video]
AllowHiResModes=true
ScreenWidth=1024
ScreenHeight=768
StretchMovies=no

Hotkeys

Here follows a list of hotkeys that can be found and adjusted through the game's option menu.

Options (ESC)
Opens the options menu.

Guard (G)
Instructs your units to guard their position and attack any enemy units who approach.

Guard Object (CTRL + ALT + Left mouse click)
This instructs the selected units to guard the clicked unit. This works great for defending your Harvesters, simply tell a few units to guard the Harvester and they will follow it around and defend it from any threats.

Scatter Units (X)
Scatters all selected units. Good for evading enemy fire and from being run over.

Stop Units (S)
Tells your units to stop their current action. If you select aircraft in the air and press S they return to base immediately. This is great for getting them out of the enemy base in a hurry away from SAMs.

Follow Unit (F)
This makes the screen follow a selected unit. This is useful for monitoring Orca Bomber attacks without having to worry about manually scrolling the screen.

Force Fire (CTRL + Left mouse click)
Forces the selected units/structures to fire upon the selected location. Good for attacking

cloaked units/structures.

Force Move (ALT + Left mouse click)
Forces the selected units to move to the selected location or get as close to it as possible.

Set Rally Point (CTRL + ALT + Left mouse click)
Instructs the selected production structure (Barracks or War Factory Factory) to send the units it produces to the selected rally point.

Move to Radar/EVA Event (V)
Positions the screen to centre on the last in-game event. For example, when you hear the 'Harvesters are under attack' warning, hit V and it will center the screen on the Harvester which is being attacked.

Waypoint Mode (W)
Activates waypoint mode.

Loop Waypoints (SHIFT + Left mouse click)
Allows you to select a waypoint path and make it continuously loop. To create the loop SHIFT + *Left mouse click* on the first waypoint in the path. This is useful for setting up patrols around your base – simply set the waypoints put them into loop mode and then set the desired units on the path.

Waypoint Guard Patrol (CTRL + ALT + Left mouse click)
When you have created a path for your units to follow if you want them to engage any enemy units they encounter, select the group of units and CTRL + ALT + *Left mouse click* them on the selected path. The units will follow the path and destroy any enemy units they encounter to their destination and then return to the path.

Delete Waypoint (Delete)
This command deletes selected waypoints in your path.

Set Tactical Map Locations (CTRL + F9-F12)
This will place a bookmark on the current screen location.

Center Tactical Map on Base (H)
This command centers your view around your Construction Yard. This is good for quickly returning to your base to select produced units and placing down ready structures.

Sidebar Up (Page Up)
Scrolls both the units and structures sidebar up one full page.

Sidebar Down (Page Down)
Scrolls both the units and structures sidebar down one full page.

Toggle Power Mode (P)

Activates the power mode which allows you to turn structures on and off.

Screen Capture (CTRL + C)

Takes a screenshot of your view and places the file in your Tiberian Sun directory.

Next Unit (N)

Selects the next unit on the map.

Previous Unit (B)

Selects the previous unit on the map.

Select All (E)

Selects all your units within your view.

Create Team (CTRL + 0-9)

Creates a team of the currently selected units. This makes selecting specific squads of units easier.

Select a Team (0-9)

Selects one of the previous teams which you have created.

Center on Team (ALT + 0-9)

Selects and centers the view on the chosen team.

Add unit to Team (SHIFT + Left mouse click)

Adds a new unit to the selected team.

Toggle Alliance (A)

This command creates an alliance between you and the player you wish to be allied with. Simply select one of their units and hit the A key to set up an alliance. To break an alliance simply repeat this procedure. The other player you are forming an alliance with must also form an alliance with you for it to be complete.

Toggle Radar Map (TAB)

By hitting the TAB key it toggles the view between the minimap and multiplayer scores.

NOTE: Some hotkeys are not set on first installing TS. Page User for instance, is not set; neither is Sell. These two hotkeys especially are useful to have assigned.

Glitches considered cheating

Many players out there like to try and push the rules to the very limits. Here follows a list of in-game glitches that are considered cheating and should in no circumstances be used for personal gain. If certain glitches such as the FS or EMP glitch occur in game accidentally you should attempt to correct the glitch immediately.

1. **Build anywhere glitch**
    I'm not going to tell you how to do it but with this glitch certain players have found a way to build anywhere by glitching the build menu. Clearly this is a very serious form of glitching.

2. **EMP glitch:**
    If you power your EMP cannon down as it is about to die you can rebuild an EMP cannon and it will be fully charged, thus eliminating the need to recharge your EMP. Don't do it.

3. **Infinite Firestorm (FS) glitch:**
    Similar in a way to the EMP glitch, the FS glitch allows an unscrupulous player to gain infinite firewall without actually having an FS generator. This can often happen accidentally as it is caused by your firewall being activated while the FS generator dies. If it happens accidentally, you should fix the mistake right away and make a new FS gen and/or sell FS track.

4. **Carryall/plane landing glitch:**
    A difficult if not impossible glitch to actually prove, this glitch mainly applies to Carryall attacks where in a defending player clicks under the spot where the Carryall is about to land and so causes the Carryall to take off again and often die to SAM fire in the process. This glitch is very common in the modern game and in multiplayer games can often occur accidentally if say one or more allied players are sending defensive units to come and help defend. You should try your best not to glitch your opponent's Carryalls, though everyone has probably done it by accident some time in their playing careers. Note though that legitimate ways of causing Carryalls to 'glitch' are either placing a building (Tiberium Silo is a good one) under the spot where the plane is about to land or by moving infantry underneath where the Carryall is going to land.

12. Credits, acknowledgements and links

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If you have any suggestions or queries you can contact me by sending an email to mole40k@hotmail.com, or by visiting my personal website is www.mjryder.net

Thank you for reading,

Mole40k