

Strike Tutorial #3 – Complex Strike

In this tutorial you will use the skills gained in the earlier two scenarios to neutralize Zinder Airport. You have a Squadron of the latest Russian MiG-23s, and a section of Su-24 bombers. The MiG-23 is a very prolific Cold War era Warsaw Pact aircraft that was once used by over two dozen countries, and is still found in almost a dozen. The MiG-23MLD 'Flogger K' is the ultimate evolution of this durable fighter, over 500 of which are in reserve status of the Russian Air Force today. The Su-24 is the best medium bomber to come out of the Soviet era, a direct match to the American F-111, unlike its American opponent, it is relatively easy to maintain, rugged and reliable - it remains a very capable strike platform. Over 400 of these aircraft of several variants remain in service today.

A complex Strike, it not necessarily difficult; it is complex due to the mixing of strike platforms (aircraft types), munitions and targets. To be effective you must analyse the targets, identify the best munitions and platforms to strike them with, chose a sequence, plan it all out and execute.

You won't have instructions popping up in messages during this tutorial, a few comments because I can't resist, but all the planning work is at the start and the instructions will be in the briefing. You should feel free to re-run this scenario several times to understand the concepts better.

Note: This tutorial should take about 1 hour to complete

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Briefing

Your task today is to neutralize Zinder Airport. The word neutralize is important, airports are almost impossible to destroy from the air. To properly destroy an airport would likely involve heavy machinery ripping up the airstrip and taxiways, or nuclear weapons. Bombs will put holes and craters in tarmac and cement – those can be filled quite easily. Buildings can be blown up, but tents and weather shelters can replace them in hours. Fuel and munitions will be destroyed but can be quickly replaced. So your job is to close the airport for as long as possible, thereby preventing enemy aircraft from using it.

So what makes up an airport? Click on Zinder Airport, hit '9' on your number pad to change to unit view, and zoom in so your scale is in meters and not miles. This is what this very small airport has:

Target	No	DP	Effect of damage/destruction	Remarks
Runway	1	900	AC cannot take off or land	Special munitions only Cannot be destroyed
Runway Access point	1	1000	AC cannot taxi to runway	Cannot be destroyed
A/C Hanger	1	600	AC inside can be destroyed	Vulnerable to most weapons
Tarmac Space	3	300	AC parked can be destroyed	Cannot be destroyed
Avgas Tank	1	20	No effect but usually points	Vulnerable to fire
Ammo Pad	1	300	Ammo lost	
Ammo Bunker	1	1600	Ammo lost	Needs penetrator
ATC Radar	1	1	Radar destroyed	Very vulnerable
Control Tower	1	75	No effect but usually points	Has weather radar

Terminal	1	1200	No effect but usually points	
Open Parking Spot	1	300	AC parked can be destroyed	Cannot be destroyed

Now let's take a look at your assets:

1 x Su-24MR: great for finding out which of the parking spots are occupied by aircraft, but remember you cannot see into hangers or HAS (hardened Aircraft Shelters).

4 x Su-24M2 Fencer D: These are your heavy strike platforms. They have your only penetrators, a key weakness in Soviet era munitions. They also have some decent 500Lb guided bombs.

12 x MiG-23MLD Flogger K: These have a mix of 'Anti-Runway', Cluster bomb, Incendiary bomb, General Purpose Bombs and Rockets. Key thing to note is that none of these munitions are guided, and all have a Lo-Lo-Lo profile. It's a good thing your target is only about 100nm away; you may note that the range in this profile for these aircraft is quite short.

Your next step is to figure out your plan. What do you want to destroy, why and when? Timing is important! There are ways of making everything arrive at the target at once, but this would be complex and quite unrealistic. The commander of the attack would only want a maximum of 2 or 4 aircraft directly over the target at any one time, otherwise the risk of collision is way too high. CMANO does not model mid air collisions, nor does it model shrapnel from one strike hitting aircraft from another – but it does model the time it takes for aircraft to do things like take off, assemble etc.

The subject of **Time On Target (TOT)** is quite an active discussion on the forums and coordinating complex strikes is one of the most fun and satisfying aspects of the game. In this scenario you will have a few aircraft to coordinate – imagine that you have aircraft from several different bases, some needing refueling to reach the target. Now add surface and air launched cruise missiles flying programed routes. Layer in some helicopters, artillery, Surface to Surface Missiles (SSM) and you have an interesting problem to handle. You can worry about that later, right now you need think about timing your reconnaissance and strike assets.

So do you want to close the runway first? Kill the radar first? Destroy the Ammo and Fuel first? Kill parked aircraft first? These are all good answers; your job is to chose one.

Reconnaissance:

First let's take a better look at your reconnaissance aircraft. Knowledge is a powerful tool, and this is the weapon that will inform your plans. And even though it is virtually unarmed (this one has some defensive air to air missiles) it is still a useful weapon. The Su-24MR Fencer E, is equipped with multiple sensors. Pop open the DB and take a look:

- SLAR – this is an early technology ground search radar built when radars were big, too big to fit in the nose of the aircraft – hence the Side Looking.
- TFR – this was truly state of the art technology in the early 80's. Terrain following radar allowed for high speed low level flight at night and in poor weather.
- Camera – the Fencer has three of them, an Oblique (great for analysing depth), panoramic (good for the big picture), and TV or video. In COMMAND you get instant return on what these

cameras, but in reality the film from these would be analysed on the ground for hours or days, and these were very capable high speed cameras for their time.

- IRLS – Infra Red spectrum allowed for night reconnaissance
- MAWS, RWR & DECM are all defensive systems – very useful if your going in ahead of the Strike.
- Mk1 Eyeball: The vast majority of units will have this as a sensor, and its quite handy. The 50nm range, as with most sensors is affected by curvature of the earth or [horizon](#), so be sure to calculate for that.
- Finally, you will note that she is carrying an ELINT pod. If you drill into the DB on that you will note that it will easily detect electronic emissions from long distances.

So what do you do with this aircraft? Well that depends on what you wish to achieve. You could put it on an area surveillance task, through it up to 40,000 feet and let the ELINT pod do the work. But that won't find where the enemy aircraft are located on your target airbase.

Now for this mission you need to get down and dirty! The task here is to locate where the bad guy's planes are so you can better direct your bombers. This means you will be looking for them in the visual spectrum not the electronic – because those planes won't be emitting anything. You will need to see the target with your eyeball, cameras and IR. Its unlikely that your radar is good enough to pick them up but many modern radars will be useful in this role. To do this you need to be low, and to survive when your low you need to be fast. There are two ways of doing this:

- **Manually:** Launch the Fencer, plot a course directly over or very close to the target base. Make sure there is a Waypoint in your course before and after the base with a straight run over the target. When you launch keep your Altitude around 12,000 ft to conserve fuel (not a requirement here but good practice). At the waypoint before the base set your speed to afterburner and your Altitude to about 500ft. At the waypoint after the base slow her down and bring your altitude back up.
- **Mission:** Define an area (Ctrl +Right click), drag a box and release. Four RPs will appear. With those RPs (and only those RPs) highlighted, create a Support mission. You will see three sides of the area linked with light blue lines and arrows. Move the RPs so that one leg of the box is over the target, making sure the other RPs don't create a cross or messed up route – or the route planning for the mission will fail. Adjust the speed and altitude of the mission. Add the Fencer-E. This method loses some control over the speed and altitude as it remains steady for the entire circuit but it takes a bit of micro management away from you.

Strike:

You could handle this attack manually, its really not that big – but I would advise employing missions - the process I use is this:

- Make sure you are in Group view (Number pad '9' toggles between group and unit view)
- Select the target airfield - you will do a series of missions with this selected
- Hit **Ctrl+F11** to bring up the mission box
- Name the mission, select Strike, Land Strike, active
- Now you have all of the possible targets in the Target list
 - Chose what this mission will be for -say 'Parking areas'
 - Add 'parking areas' to the Name box

- Delete all the other targets from the list leaving only the 3 Tarmac and one parking space
- If this is going to be your first target leave the activation menus alone
- Select your strike aircraft (lovely target for Cluster bombs or rockets)
- Now you want to give your Recon AC some time to do its work so set this mission to activate at about 0820. So in either the mission creation screen or in the mission planner set the Activation time to the scenario date and a time of 0820. A red **[D]** will appear beside the mission name, which will be in *italicized red*.
- Click Create New Strike Mission directly from the mission planner (all the targets come back to the list as the whole base is still selected)
 - Chose another target type – say Ammo Bunker
 - Change the name
 - Delete all the other targets
 - Select your Aircraft
 - In this case you want this to be the second target so click on the Activation Time and make it ~0822 (2 minute after the first mission starts) this will set the take off order from your home base, and this mission will follow the first
- Repeat as needed.
- I would launch my Recon Fencer first, then have the following missions - but you should experiment:

○ Zinder – Runway	2xMig BetAB-500
○ Zinder – Parking +20	4x Mig RBK-250 CB
○ Zinder – Radar +22	1x Mig 57mm Rkt
○ Zinder – Hanger +24	1x Su 500Kr
○ Zinder – Control +26	1x Su 500kr
○ Zinder – Ammo pad + 28	2x Mig ZAB-500 Incend
○ Zinder – Ammo Bunker +30	1x Su KAB 1500Kr Pen
○ Zinder – AvGas +32	1x Mig 57mm Rkt
○ Zinder – Access +34	1x Su KAB 1500Kr Pen
○ Zinder – Term +36	2x Mig FAB 500
○ Zinder – General +40	(all targets, a sweep up) - None left

Now, once you are ready, close the mission interface, hit start and watch your air force go to work.

Recon Msg: 0820:

Back to Reconnaissance: By now your Recon bird should be telling you something about the airfield, otherwise there is no point risking an aircraft for this task. Reconnaissance is a vital part of the game, and it is not always easy to do. Novice players often make the mistake of ignoring recon assets because they are generally vulnerable and carry either no or very few weapons, or if they use their recon asset, not making the most of the results. You should gain at least three things from a good reconnaissance:

1. Understanding of the general target area. On an airfield and many other infrastructure type targets, you will have a very good idea of where buildings are and how things are laid out – it is hard to move a building or runway. But, new buildings or other structures could have been built since you last gained intelligence on an area – look for temporary structures, parking spaces turn to revetments, vehicles etc.

You will note that this airbase has something you didn't know about before. What is it and what does it mean?

2. Identifying any defences. As a general rule, if something is set up to shoot at you, it will probably want to hide until it does – its an important safety tip for defenders! And if you aren't using your reconnaissance assets properly, chances are the first time you find these defenders is on your final bomb run – which at a minimum will make your pilots pull up quick and probably miss their target, but it could mean casualties. If you find a defender early, you can adjust your plan and kill or neutralize them first.

3. Identify how the enemy is deployed. This is a large subject, in larger scenarios you want to know the layout of ship formations to find a gap or weakness, or where his electronic jamming is weakest etc. In this scenario your interest is where the heck is he parking his aircraft. No real point hitting an empty parking space, it just waists ordnance. If his aircraft are in a revetment, perhaps a guided bomb is needed, if in the open and cluster munition is all you need, etc. In Command this is a very common piece of information that you will want to know, so remember that you can use the 'Contact Report' to help you out. Once you have run your Recce bird over the base:

- Go to Unit View,
- Pick an enemy facility with the yellow square and black triangle in the lower right hand corner.
- Click on 'Contact Report'
- There are two tabs: 'Emissions' and 'Spotted hosted units' – chose the 2nd tab
- Here you should see a list of what you have seen parked on this facility and how long ago you saw it. Not particularly relevant in this scenario but consider a target base with both F-15s and A-10s – which is more important to hit – at that time – in your situation. Decisions...

Adjustment: Once your recon aircraft finds out where the bad guys are parked, you should adjust the target list of any strikes that are hitting the parking spaces. But remember – you cannot see inside the hanger so assume that it has something in it.

Msg 1: 0825

Make sure you have all courses selected to display (Map Settings/Plotted Courses/All). You may want to pause the game at this point '**Space Bar**'.

You will note that the missions are taking off and plotting an AI derived course. This is a pretty basic course as the range of these aircraft are so limited, but you can change it if you wish.

Select a unit, its course will appear brighter than the rest: Each course will generally have 5 nodes, a mid course ingress and egress, an IP (Initial Point – where it starts its attack run), the Target which it may not reach if munitions are expended first, and where it enters the final approach for the base. You can't change the target here but you can drag each of these nodes around a bit – if it exceeds that AC range it may get confused so be careful.

You may also note that the order may not be perfect, perhaps not enough time was allowed to unscramble the traffic at the base. Once again, experimentation is good – perhaps after the first strike it doesn't matter.

Msg 2: 0845:

You may note that the Su-24s with the TV/EO bombs are hanging around a bit – they are guiding their bombs. In this case it is a good thing that the threat level is minimal and the weather permits this behaviour, as they are now up around 12000 ft. They will, in most circumstances, only drop one weapon at a time, allowing them to guide it accurately. More on these issues in later tutorials.

Msg 3: 0847:

By watching the log, you will get an indicator of the damage you are doing, fires created, targets destroyed, other targets detected etc. As your aircraft fly over the target area they also report on previous damage – for instance the runway (if you are in Unit view) might be heavily damaged, therefore preventing those aircraft you have found in the parking areas from taking off. Or not...

Msg 4: 0850:

You should watch for unexpended ordinance – if the threat level is low. For instance, if one of your Su-24s dropped 2 out of 3 KAB-1500 Penetrators, and destroyed its target, it will head home with the third bomb still strapped on. You could, if you like, take over this AC and give it another target. Select it, hit 'U' to un-assign it and you now have control. Either assign it to the 'General', or sweep up mission you made earlier – or give it a specific target. It's a shame to waste a perfectly good bomb!

Msg 5: 0855

Your last strikes are probably coming in right about now. With any luck this airport is a smoking ruin and will take several days of concerted effort to repair.

If you weren't quick enough at closing the base, some of the resident aircraft may have taken off – well, you have guns for that. If you were quick, you may have kept all aircraft on the ground – you can see them in the parking areas, but not the ones in the hanger. So make sure you kill that just in case. You can always re-task assets to focus on these guys once you find them. An airbase with no aircraft is not much good to anyone, and the best enemy aircraft is a smoking pile of twisted metal – no matter how it arrives at that state!

Msg 6: 0857

Your strikes should be just about finished now, no rush if they aren't, take your time. I would recommend you try this again and experiment. First you may want to load up your save game in editor mode, and check out the Red side to see what the actual damage is, compared to what your BDA is telling you.

Another idea instead of the multiple strike missions is to make a patrol mission – name it 'Holding' or 'Marshaling'. Turn 1/3 rule OFF, set flight size to pairs and assign all your aircraft. Then you can 'micro' the attack (i.e. micromanage each detail) and bring your AC in at your leisure. You will need to 'U' un-assign, them from your holding mission before you conduct your attacks though or it might confuse them – their only pilots after all 😊. Careful that the Reds don't scramble on you once they see you coming though.

When you have large strikes, with dozens of AC this 'Marshaling' technique is a good way of setting things up – get everyone airborne and dump them into a strike mission all at once to overwhelm heavy defences.

Summary

In this tutorial you have learned how to prioritize your strike to gain maximum of effect of weapons on an array of targets. You will rarely – in the game or in real life – have enough munitions or resources for all of the objectives you need to achieve. Therefore, it is important to make choices about which targets get your best munitions, when and by which method.

Another factor to consider is the reaction of the enemy. In this scenario the enemy's options are quite limited, he can scramble his unarmed aircraft and you need to shoot them out of the sky instead of killing them on the ground. Most scenarios will have a much more robust and active enemy - he always gets a vote and will try and mess up your nicely laid plans.

Enjoy playing around – see you in Tutorial 4, where the enemy might try and fight back.

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