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JUMP SCHOOL

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INTRODUCTION

The 3rd Ranger Battalion takes pride in being an Airborne unit. However, the Airborne Training itself is not required upon entry to any of the companies in the ORBAT. However, some Detachments with the MFF specialization do hold a prerequisite with a completed Jump School.

During this Jump School, also referred to as Basic Airborne Course, you will be thought everything regarding the Airborne Operations conducted in the 3rd Ranger Battalion. This manual is also used as reference in all Airborne related exercises in the unit. This manual also uses references on terminology which can be found in the Ranger Assessment Selection Programme.

During exercise or operations, it's important that all personnel follow these strict safety instructions while conducting Airborne Operations. Any unsafe acts will result in verbal warning as mistakes do happen. A second offense will result in removal from the trainings.

ACTS OF UNSAFETY

1. Do not communicate with the pilots or any other active personnel in the vehicle; only communicate when you are spoken to directly by personnel with an active lead position. This is to avoid leadership and pilots from making small mistakes that can end in catastrophes.
2. Do not touch anything within any of the vehicles unless told directly to do so, this includes the inventory, eject or any other scroll wheel options. The orders to access inventory and to eject will occur, however, personnel should only do so when directly told to do so.

1. AIRBORNE INSERTION TYPES

There are two airborne types, these being static line jumps and military free-fall. Both have their own benefits and downsides, below these will be covered.

STATIC LINE JUMP

A static line is a fixed cord attached to a stable object. It is used to automatically deploy the ripcord for airborne soldiers. And is mainly used for operations where the jump occurs in very low altitudes, these jumps usually occur on altitudes from 120-400 meters.

In ArMA 3 the feature of automatically deploying your ripcord is not implemented. This means that the soldier will have to manually do so immediately after ejection. Not doing so immediately, carries the risk of extreme injury.

MILITARY FREE-FALL

Military Free-fall is a method of delivering personnel to a designated drop zone via a free-fall parachute insertion. Three techniques are used, High Altitude – Low Opening (HALO), High-Altitude – High Opening (HAHO) and Low Altitude – Low Opening (LALO). In the HALO and LALO technique, the soldier opens their parachute at a low altitude after free-falling for a period. In HAHO the soldier deploys their parachute at a high altitude, often just a few seconds after jumping from the aircraft.

HALO AND LALO

In a typical HALO exercise, the soldier will jump from the aircraft, free-fall for a period of time at terminal velocity, and open their parachute at an altitude as low as 150-100 meters. The combination of high downward speed, minimal forward airspeed, and the use of only small amounts of metal helps to defeat radar and reduces the time a parachute might be visible to ground observers, enabling a stealthy insertion.

HAHO

The HAHO technique is used to airdrop personnel in high altitudes when aircraft are unable to fly above enemy skies without posing a threat to the jumpers. In addition, HAHO parachute jumps are employed in the covert insertion of soldiers into enemy territory, in circumstances where the covert nature of an operation may be compromised by the loud noise of parachutes opening at low altitude.

Meanwhile all the above can be executed with the steerable parachute, only the static line jump can be done with the non-steerable parachute. Both of which requires the soldier to deploy the ripcord himself.

2. JUMP ORGANIZATION

In many jumps there will be multiple elements inserting together. To coordinate the insertion of this it is important that everybody is aware of the whole process, from the different perspectives. Below is a stage-map covering the different stages and their procedures.

During all stages the JUMP MASTER will coordinate everything together with the Pilot and Co-Pilot which is manning the aircraft for insertion. Everyone participating in the insertion regardless of rank will have to follow the Jump Masters protocols.

STAGE 1 – BRIEFING

In this stage the JUMP MASTER will brief all soldiers participating in the insertion on the jump procedures, these are identical each time but are mandatory for the JUMP MASTER to hold them, it covers the jump procedures and radio procedures as well as the general safety rules.

STAGE 2 – PARACHUTE FILE

A Parachute line will then be formed, this is a normal FILE formation but with spacing's between each participating elements (Squads). This spacing, if any, should not be bigger than 3 meters and are only there for the Jump Master to notice the split of elements. It is important that each Squad Leader is at the front of his element and that each Team Leader is at the front of his team.

STAGE 3 – EQUIPMENT CHECK

Jump Master will now inspect all equipment for all personnel that are in the file formation. This is to make sure that all personnel have the right parachute for the insertion.

STAGE 4 – NUMBER ASSIGNMENT

The whole file formation will now receive its numbers; these numbers are assigned to all jumping personnel in the aircraft. It is the soldier's responsibility to remember his assigned number.

STAGE 5 – NUMBER VERIFICATION

Each soldier will now be asked to say his number, starting from the front of the line and ending at the rear of the line. If any number is not said, failure on stage 4 will have to be corrected immediately.

STAGE 6 – AIRCRAFT LOADING UP

All personnel will now board the aircraft one-by-one, saying his NUMBER and "IN" when he has fully mounted up, allowing the next in line to load up. Example "1, IN" – "2, IN". etc. Number 3 should never mount up before 2 has stated that he is in. During this stage the pilots will be conducting their pre-flight checks and communicating with other elements, so it's important that the Jump Master keeps full count. When all personnel have mounted up, the Jump

Master will call out on the specified frequency "All Personnel mounted up in Phoenix 1-1 (CALLSIGN), ready to move out".

STAGE 7 – ON ROUTE TO DZ

During the time in the air there is a lot of communication going on between ground elements and air elements. Therefore it is necessary to refer to the acts of unsafety on how to act onboard the aircraft. Only ACTIVE personnel should speak over communications. The only exception is if you must go AFK, you should then immediately state your name and your number to the Jump Master, so he can skip your number. If you return from AFK, you will have to report back in to the Jump Master.

STAGE 8 – APPROACH AND RADIO PROCEDURE

During the approach and jump the Jump Master will say five different commands, all of these must be observed accordingly. They will be said in the following order:

STAND BY – This will be called out, so all personnel are paying attention, this is usually called after red light.

STAND UP – Notice that the jump will commence in 30 seconds and personnel will have to get ready.

HOOK UP – Notice that the jump will commence within 15 seconds and personnel will have to get ready.

MAKE READY – The Jump is within 5 seconds of jump. Personnel will now have to scroll and be ready to eject when their number is being called out.

After 'Make Ready' the Jump order will be given starting with 1 and ending with the last number in the parachute file. There is a 0.5 – 1.0 second break between each number to guarantee that soldiers don't crash into each other..

STAGE 9 – JUMP AND LANDING PROCEDURES.

When your number has been called out you will click eject. You will now instantly go into a free-fall mode, depending on the airborne operation you will either pull your ripcord (deploy parachute) immediately or wait until a certain height. The Jump Master will have briefed you during Stage 1.

Right before you eject you will say your number and "out" over local chat NOT RADIO. Example: "2, out". This signals the Jump Master that you have successfully left the plane.

When you deploy your parachute, you will signal on a designated radio frequency that your parachute has successfully opened. This frequency is usually your element frequency and not the designated jump frequency. You will signal by saying "LAST NAME, deployed". Example "Smith, deployed".

When you have successfully landed it's extremely important to call it out on your frequency as well, failure to do so will give your leader the impression that you have been injured. If you have not been injured and it's simply a failure to communicate, you will have slowed down your team unnecessarily.

After a successful landing you will have to maneuver to a designated rendezvous (rally) point. Your priority upon landing will be to find someone else, regardless of what element they are with, and stick together. Beware of hostiles in the region remember to PID, as most airborne troops jump into hostile areas. Whatever you do, don't search for your own team alone.

Stick with the first friendly you encounter and make your way to the rally point, keep going down the chain as you find more personnel to link up with. Once you reach the rally point your Squad Leader or Platoon Leader will ensure that everyone is present and proceed with further tasking.

If personnel are missing, orders will be given to look for these soldiers, the mission does not proceed until everyone has reported in one way or another.

3. JUMP TECHNIQUES AND ALTITUDES.

In the static line jump the only thing you will have to do is maneuver from a low altitude, however your parachute should be deployed immediately. Give yourself plenty of time to plan your landing over the small drop zone.

HALO AND HAHO Jumps are different. They have insertions where the soldiers jump from altitudes between 1000m to 5000m. In HALO jumps the ripcord should not be pulled before around 600m, while in HAHO jumps the ripcord should be pulled after 10-15 seconds of the jump depending on the altitude which is being jumped from. For some HAHO and HALO jumps the usage of oxygen masks are required to avoid suffocation while free-falling.

The HALO technique is also the technique executed when delivering equipment to airborne troops in OPFOR territory. (See Aviation School of Excellence for air re-supply)

4. GREEN LIGHT / RED LIGHT

The Green Light and Red Light is represented in some of the aircrafts that the unit deploys. This is used for the pilots to signal the Jump Master and the passengers in the back when the plane is over the designated DZ and when the plane is jump ready. Both of those criteria's must be met for the pilots to call Green Light. Red Light is called before and after a Jump, successful or not, it means that no more jumps are allowed from the aircraft, nor should anyone attempt to do so, regardless of where they are in the parachute file.

Airborne Soldier should never use the light as a reference to make their decision to jump or not. The Jump Master is responsible for keeping clean communication with the pilots and the soldiers at the same time, keeping his eye on the light for when the plane has surpassed the DZ.

Jumping on Red Light is not allowed and doing so risks serious injuries on unplanned jumps. Only the designated DZ is cleared for jumps by ground troops and jumping into undesignated areas is a serious strike to the organization of such jumps.

5. BAD EXITS / BAD JUMPS

Airborne Operations in Arma 3 can sometimes have Bad Exits. When they do occur, everyone must be trained on what to do if such a situation is to happen. Soldiers jumping with equipment weighing more than their own body weight have a greater potential for a bad exit. Bad exits will include rolling, spinning or deploying your parachute too early. All these events have the chance of ending with casualties. If the parachute is deployed too quickly whilst doing HAHO and HALO operations where jump doors are used, they have the chance of hitting the aircraft, which can render the personnel unconscious.

Bad Jumps also occur during free-fall, if some personnel lean too much to the sides, resulting in uncontrollable spinning. The jumper will still be able to deploy his parachute but it will be extremely unstable. Lean to the sides with caution.

6. LANDING PRIORITIES

When jumping it's extremely important to understand that from the moment you jump out of the plane, until the moment you rendezvous with your element, you are fully responsible for yourself. In the majority of insertions the parachute will be steerable, and it's important to know what to look for and what to avoid.

Airborne operations have little chance of air support in the opening stages, so it's important that the operation has as few injuries as possible and the personnel present should understand that the ammunition they are carrying on their body will most likely be the ammunition they use for the majority of the mission.

When landing remember to:

- Look for open landing points. Keep your eyes open for openings in the terrain and maneuver yourself towards it.
- Avoid the water at any cost. In Arma 3, once you have managed to get yourself in the water, it will take some time to get yourself out of it. With heavy and wet gear on you, it will only make your situation worse.
- Avoid landing on cliffs, uneven terrain, and thick forest lines. Don't get yourself stuck in areas which are hard to get yourself out of.
- Always maneuver slightly towards the rally point marker. However, don't move yourself too close. Rally points are usually not far away from contact points with potential hostile units, getting within the line of visibility for hostile units can compromise the whole operation for all personnel.
- Understand how to maneuver your parachute. If you hit the ground too fast you WILL end up injured and remain combat ineffective until you are found and someone is able to assist you.

JUMP TYPE	HEIGHT OF AIRCRAFT	DEPLOY CHUTE
HAHO	1000m	600-550m
HALO	1000m	150-100m
LALO	200m	150-100m