A Day in the Life **of a PLA**

Parachute landing areas (PLAs) indicate the main – but not the only – landing areas for major parachute operations. The nature of operations and procedures can differ between aerodromes, so make sure you do your homework before departing.

For every aerodrome you fly to, check the *AIP New Zealand* aerodrome charts and the Visual Navigation Charts for parachute landing areas along your intended track. Actively look for the parachute symbol and read the notes below the AIP graphic, as busy PLA sites will often be accompanied by special procedures.

Simon Spencer-Bower, owner of Wanaka Helicopters, has significant experience operating in and out of Wanaka's busy PLA.

"The procedures work well for local operators because we are all aware of the airfield procedures and the aircraft and pilots involved. But problems sometimes occur when itinerant pilots who are not familiar with local procedures, or with the airfield landing plate, join the circuit."

Avoid carrying out a standard overhead join at aerodromes where intensive skydiving activity takes place daily. The AIP instructions may specifically state to either join straight-in or downwind.

If you are NORDO, never join overhead at an aerodrome where parachuting may be taking place.

"At Wanaka, we discourage people from doing a standard overhead join. That puts you straight onto the non-traffic side where the skydiving operations take place," says Simon.

If you need to carry out an overhead join to determine wind characteristics, then hold away from the aerodrome until all canopies are on the ground and you've confirmed there's no skydiving activity.

Third-party Risk

Mark Funnell, Operations Manager and Chief Pilot for Skydive Auckland (Parakai Airfield), Skydive Taupo, and Taupo Tandem Skydiving, rates over-flying traffic as one of their greatest risks.

"When it comes to what we call 'third-party risks', we have the same problems as anywhere else: the risk of another aircraft conflicting with our operations.

"Taupo is susceptible to over-flying traffic due to its central location. But we are quite fortunate that the drop zone is reasonably busy (operational seven days a week) and therefore, reasonably well known.

"Our guys are trained to listen out on the radio for traffic likely to conflict, so they can break the chain of events that could lead to a potential accident.

"However, there are limitations.

"I have one pilot per plane, and three or four radio frequencies for them to monitor. It can get very busy.

"The big thing is, if you're unsure, make a call asking, 'is there any parachuting happening at the moment?' It goes without saying that we'd rather talk to you early, than risk an avoidable conflict."

Steve Holder, Senior Pilot and Quality Assurance Manager for SkyDive Wellington, based at Masterton, urges pilots to treat PLAs in the same manner as danger areas.

"Always listen out on the local aerodrome frequency and make your intentions known well in advance, even if you intend to transit overhead well above the aerodrome circuit height.

"Radio clutter can sometimes be a very big problem for the jump pilot, especially on 119.1 MHz. So please do not assume that simply because you have transmitted your intentions, the jump plane or ground radio has actually heard you.

"And always proceed with caution until you can ascertain what's going on. We have had aircraft passing directly through the centre of the PLA. They've incorrectly assumed that because they spotted a parachutist below them, there were none above them." says Steve.

Photo courtesy of Skydive Wanaka

Mark Funnell explains how being predictable helps everyone at the field.

"Pilots who are predictable make it easier for everyone. Carefully consider your runway selection, because using grass cross vectors can put aircraft in conflict with circuit traffic and our skydivers.

"On that note, skydivers don't like helicopters because they can stop and move quickly in any direction, making them less predictable," says Mark.

Simon Spencer-Bower adds, "because of the versatility of helicopters, an operator or itinerant may tend to think if they can just sneak in low on the non-traffic side, then they'll be out of everyone's way. Whereas they could be right in the middle of a shower of sky divers!"

Skydiving Play-by-Play

It can take a jump aircraft anywhere between 15 and 45 minutes to complete a run from takeoff to touchdown. Parachutists can be dropped from as high as 20,000 feet agl (for tandem jumps), or as low as 2000 feet agl (for sport jumpers), and their chutes usually open anywhere between 5000 and 2000 feet agl.

Jump aircraft will always make a "two minutes to drop" radio call that states the number of canopies it is about to launch, and where they will be dropped.

Skydive Wanaka CEO, Evan Pearce, says the position for the drop is dependent on wind strength and direction.

"The pilot generally positions the aircraft within 3 NM from the PLA in an upwind direction. If winds aloft are light, then the aerial drop point will be closer to the PLA, and further away if winds are strong. After the pilot positions into wind and releases the first tandem parachute, the standard phraseology, 'jumpers away', will be broadcast on the local aerodrome frequency. If there are clients remaining on board who have paid for a higher altitude, the aircraft will resume its climb.

"Other pilots need to understand that manoeuvring whilst in free fall is difficult, and free-falling parachutists can also be extremely hard to see."

Diligent monitoring of the MBZ frequency is essential. Transiting aircraft should remain well clear of the aerodrome area – at least 3 NM away.

Evan Pearce continues, "Although rare, problems can occur during parachute opening. A main chute cutaway will occur if a canopy tangles or does not deploy correctly. After it's jettisoned, it will free float in the direction of the prevailing wind.

"If a bag lock occurs, the entire parachute – including storage bag – will eject as a solid object and fall to the ground much faster than just a main chute cutaway.

"Both situations are managed by the flight-following person on the ground. The radio call we'd make is, 'Wanaka traffic, Skydive Wanaka has malfunctioned canopy descending to the (location) on the airfield.' When it's landed, the other call on the unattended frequency will be, 'Wanaka Traffic, malfunctioned canopy has landed.'"

When Departing

When departing an airfield with a PLA, make sure there aren't any canopies in the air before starting your engine. If you have your prop turning on the ground, operate with extreme caution within 100 metres of an active PLA. If there are any canopies in the air, it's safest to delay your start.

If you're committed to departing before a drop begins, then it's safest to climb straight ahead for at least 3 NM before turning 90 degrees, flying parallel to the active parachuting area.

It's Called the Drop Plane for a Reason

Once the parachutists are clear, the drop aircraft will descend rapidly (up to 4500 ft/min). In many cases, the drop aircraft may actually land before the parachutists.

Skydive Taupo's Mark Funnell says circuit integration is an area of high risk.

"As drop pilots spend most of their time above the circuit traffic, one of the big risks the drop pilot faces is circuit reintegration.

"Due to our high descent rates and the associated risk, we join on the non-traffic side then join in with the other circuit traffic on final approach."

But be aware that not all jump aircraft join on the non-traffic side of an aerodrome, as the nature of operation differs with location. ■