FORTIFICATIONS AND MILITARY EVENTS (1940-1945) IN THE PROVINCE OF IMPERIA (DAVIDE BAGNASCHINO)

After the Unification of Italy in 1861, one of the problems that faced the new Kingdom of Italy was the difficulty of protecting its borders; the new frontiers that had been created completely lacked any form of defence, whereas, in the short stretches that had remained unaltered, the existing fortifications no longer suited the new territorial requirements. After a number of different projects had been drawn up by a series of commissions involved in various studies, a *Reduced Plan* was approved which foresaw the construction of a smaller number of fortified positions compared to those initially suggested; in fact, the state finances could not fund the enormous cost of the *Defence Plan* in its complete form.
The Reduced Plan therefore comprised a series of fortified positions intended to protect the major cities (Rome, Florence, etc.), coastal batteries overlooking harbours and important maritime cities (Venice, Genoa, Savona, etc.), entrenched camps on a number of passes in the Ligurian Apennines (Nava, Zuccarello, Melogno, etc.)[1] and, lastly, the "closure" of the Alps by constructing entrenched camps and barricades across passes and valleys (Colle di Tenda, Valle Stura, Moncenisio, etc.).
The first stage of the project was to construct the military roads that leading up to the chosen sites and to transport the building materials, workmen, soldiers and artillery required to equip the fortifications and batteries. The barracks, batteries and forts were built at a second stage.

In the area of the Maritime and Ligurian Alps, the defensive positions ranged from the entrenched camp at Colle di Tenda (6 forts, several batteries and numerous shelters and barracks), at Saccarello (1 battery and various barracks), the fortifications at Marta (5 batteries and several barracks) and the barricade at Colle di Nava. While these were all independent projects, the spread of the fortifications gave control of the entire area and precluded any danger of crossing roads and passes of a certain size.

The barricade of Colle di Nava

An entrenched camp was built between 1880 and 1888 in order to control the strategically important Colle di Nava and prevent any French troops that might have landed on the coast close to Imperia from reaching Piedmont and the Po Valley along the road from Oneglia to Ormea.
The Central fort and the Bellarasco fort, both sited on the col, acted as the pivotal points in the structure, flanked on the right by the Pozzanghi and Montescio "opere" or fortifications and on the left by the Richelmo "opera". The formation was completed by the semi-permanent batteries of Monte Ariolo, San Lorenzo and Poggio Forche. In addition to the pass itself, the firing range of the batteries also covered the valleys and side paths, which, when combined with the field of action of the Saccarello and Zuccarello fortifications, created an almost continuous line of defence along the Ligurian Alps.
While the Central Fort and Bellarasco swept the col and all routes leading onto it with machine-gun fire and small calibre artillery, the other "opere" covered the wings and provided long-range action using larger calibre guns.

The **Central Fort** was positioned to give direct control of the plain; it was armed with 9 BR/Ret. cannons (87 mm with bronze firing muzzle, rifled with breech-loading) on a siege carriage (mounted on wheels and easy to position in the various casemates as required) and Gardner 8-mm machine guns which covered the entire pass and the main road from Oneglia to Ormea. The road used to pass right through the Central Fort, through what was known as the "tagliata": by using two drawbridges, the main road could be interrupted, thus preventing any thoroughfare[2].
The "opera" was a *barrage fortress with ditch*, laid out on a polygonal plan and with casemates on two storeys. The lower level lay below the ditch, which started close to the road entrance into the fort, and in addition to the "tagliata", included: dormitories, command posts, latrines, stores and the four imposing caponiers that controlled the perimeter of the ditch. The caponiers have a trapezoidal structure, with rounded ear-shaped corners that, coupled with the numerous embrasures and enfilades, allow the ditch around the caponier to be controlled. The

[1] The blockade of the Apennine passes became necessary because Italy's Royal Navy, which consisted of the accumulated pre-Unification navies, was not in a position to tackle the French navy, and even less the English; therefore, it would not have been able to prevent enemy troops landing on the coast and therefore avoiding the fortifications along the Alpine chain.
[2] The road currently passes outside the fort following alterations made after the War in order to facilitate the passage of motorised vehicles.

roof was vaulted with a thick layer of grass-covered earth. The upper floor was on a level with the surrounding country, with gun embrasures for machine-guns and cannons opening at ground level. The casemates for artillery (and the other rooms) faced onto three internal courtyards with wide openings to ensure that the gas produced by gunfire could escape rapidly. The masonry walls were on average one and half metres thick, rising to about three metres in casemates for cannons and machine guns; the vaulted roofs were covered with earth to protect them from overhead shots.
The embrasures are in stone quoins or embellished with red bricks. The ditch, at the eastern end, continues for a long stretch up the gentle slope towards the Richelmo Tower, controlled by a caponier and two casemates for Gardner machine guns in order to stop the enemy infantry moving across to the left flank of the formation.
The fort is still in good condition.

The **Bellarasco Fort**, which lies south of the Central Fort and at a lower altitude, controls the road and the western and southern slopes of the valley, forming a sort of advance post for the entire position.
It too is a *barrage fortress with ditch*, laid out as a flattened rhombus with casemates on two storeys. The lower level lies below the ditch and includes: dormitories, command posts, latrines, stores (all facing onto the rear) and the two counterscarp batteries (or coffers)[3] which controlled the five sides of the ditch.
The upper level rises up with a different profile; the main façade is polygonal, stepped back in two places from the walls below, and contains cannon embrasures for six 15 GRC/Ret cannons on siege carriages and two Gardner machine guns facing west, as well as other armaments. Four pieces face the south side of the col, with front field of fire, and two face the pass and provide flanking fire for the Central Fort. The rear façade follows the outline of the lower level; beside the entrance, complete with drawbridge, are other rooms whose gun embrasures can be seen on the façade.

The **Pozzanghi** and **Richelmo Forts** are virtually identical. They were built on the high points after which they are named, dominating the Colle di Nava from the west and east respectively. They are two small “opere” with a turret and ditch, with just one storey, an underground cistern and a roof terrace that can be used as a gun emplacement.
The two 9 BR/Ret. cannons on siege carriages could be positioned as required in any of the six casemates, as could the Gardner machine guns which protected the entrenched camp from outflanking. The entrance is at the rear, protected from enemy fire, with a large vaulted passageway controlled by embrasures, complete with drawbridge and stone bridge support. In the centre of the structure, a vertical well acts as a ventilation shaft for the casemates and also supplies rainwater to the cistern below.

The **Montescio Fort** differs from the other fortifications because the artillery are positioned on “barbettes”, or raised platforms, in the open and not in casemates. The correct name for this type of fortification is *protection battery*, a form that also has a ditch - albeit only on three sides – which is completely controlled by two caponiers that are, in turn, protected by what is known as a “fossato diamante”.
All the rooms in the fortification open onto the rear façade which includes the gun embrasures, edged in red brick, and the entrance with the drawbridge. On the earth-covered roof are emplacements for two 15 AR/Ret. mortars (measuring 149 mm, in rifled steel, with breech-loading) and four 15 GRC/Ret. cannons. The latter were mounted on carriages on placements (each made for two pieces of artillery) separated by a large earth mound, below which was the munitions reserve (here you can still see the supports for the shelves were the shots were stored ready for use).
The various chambers are on two levels: on the lower level, under the ditch, are the barracks, stores, cisterns, etc., and on the upper floor are the officers’ quarters, the powder magazine and the reserves. From the entrance, if you follow the wide gallery that run across the low wall, parallel to the rear façade, you reach the cannon emplacements; at the front, a small bastion was designed to protect troops and artillery from direct fire, while the traverses at the side of each emplacement aimed to reduce the effects of crossfire and restricted flying shrapnel.

The Fortifications on Marta

[3] These are caponiers that are outside the ditch and built up against the support wall; they are therefore more sheltered from enemy fire and can cover the entire ditch because they are built on the corners. The two structures are accessible by means of two stairs that pass under the ditch and climb up two ramps inside the chambers.

From 1891 the area known as Marta became the site of an entrenched camp consisting of five defensive batteries, all armed with 15 G.R.C./Ret. cannons. Two occupied the summit and northern slopes of the "Balcone di Marta", the others were located on Cima di Marta, Testa della Nava and on Monte Ceriana. The whole area of Marta stretches west, above all the relief known as the "Balcone", forming an advance stronghold towards the French line; for this reason, the batteries were partly long-range fortifications, given that they could fire directly on targets in enemy territory. In fact, the battery of Balcone di Marta could even, at its furthest range, reach Authion where the French batteries and fortifications were concentrated. The vast barracks on Marta could house 515 men, 30 horses and 16 artillery pieces, comprising various buildings, including one with two storeys; another two shelters were built close to Testa della Nava and Bassa di Sanson, again with rooms for use by troops and an artillery store for four pieces.

The Battery on Monte Saccarello

A defensive battery armed with four 15 G.R.C./Ret. cannons (measuring 149 mm, in cast iron, rifled, rimmed with breech-loading) was built on the summit of Monte Saccarello in about 1900 in order to control the valleys leading up from Briga and the various cols between Monte Bertrand and Collardente. The four weapons were positioned behind a parapet, on a carriage (with a field of fire of approximately 150°) and were divided into two sections. A little way behind the barbettes was the underground reserve and the troop shelter, also dug into the rock, so that the soldiers could shelter from enemy fire. Inside the powder magazine, a small wooden box protected the gunpowder from damp.
Behind the ridge, in the stretch between Passo Tanarello and Passo di Garlenda, a number of barracks were used to house the troops and the materials used for defence.

The "Vallo Alpino"

The Vallo Alpino, or Alpine Wall, is a complex of defensive structures built between the two World Wars, from 1931 to 1940, to defend the whole of the Italian land frontier, from Ventimiglia to Fiume, stretching along the Alpine chain; it is a defence line that runs through the mountains, making full use of the scarce roads, paths and passes, and the difficulties created by the Alpine environment itself.
In about 1924-25 a series of works were carried out to expand the network of roads (some date back to the late 19th century) and to build new field batteries and access roads, as well as barracks, stores and a number of small underground machine gun and cannon placements in various areas along the Alpine arc.

In 1931 the General Staff of the Royal Italian Army issued the first general instructions for the construction of the new defence system which was generally referred to as the Vallo Alpino Littorio, and which, once completed, would *seal off* Italy's Alpine frontiers. A series of *circulars (*200, 800, 7000, 15000), which were followed by amendments and additions, laid down the characteristics for the fortified systems and the individual "opere" or posts, the type of weapons and artillery to be used, the barracks, etc.
Initially, the project outlined a single line of fortifications, to be constructed as close to the frontier as possible, with a few artillery batteries in the rear; later the defensive system was extended and organised as a series of lines in order to offer the greatest chance of halting the enemy attack.
So in the Upper Roja Valley, at the level of Col di Tenda, there are as many as five military positions (one of which was never finished) separated by approximately thirty kilometres; instead, in the Lower Roja Valley, there are only two lines, at the height of the ledge, about two kilometres apart, which control trunk road no.20 and trunk road no.1, both leading to Ventimiglia.

The defensive system of the Vallo Alpino comprises a number of elements: roads, barracks, stores, fortifications. The first were obviously required to gain access to the ridges and the positions on which the defence lines were based, the artillery, the barracks and the forts themselves; the second were located both at high altitudes and on the valley floor, depending on the type of building; the stores consisted of buildings used to shelter the artillery, vehicles, etc. from the weather; lastly, the fortifications were built both along the line of the ridges, taking advantage of the difficult approach, and on the valley floor where they could effectively blocked transit.
The defensive position (fortification) therefore consists of various elements:

- *The "opere"* (which based on the army circulars could be called "opere", or firing centres or centres of resistance, depending on when they were built, their main features and size) were the skeleton and most important part of the system; they were built underground (excavated into the rock) or more rarely in concrete (if no bedrock was available, the "opera" was made from a single block of concrete), with one or two entrances, a series of service chambers (dormitory, stores, generator

room, ventilation, etc.) linked by galleries, and a number of placements on the surface. They were mainly armed with two, three or four machine guns (FIAT 14/35) and manned by between fifteen and twenty troops; using machine-gun fire, above all in the form of flank protection, the "opere" covered the entire barbed wire entanglement set up on the front edge of the Resistance Position and protected the neighbouring "opere", preventing them from any enemy assault. They were generally protected from large calibre artillery, or (like the underground batteries and observation posts) could resist the most powerful artillery blasts and aerial bombs.

- *The underground batteries* which, like the "opere", were built entirely underground to protect them from enemy fire, had one or two entrances and usually four underground casemates for the same number of 75-mm cannons (75/27 cannons model 906), underground service premises (dormitories, powder magazine, command stations, ventilation, generating rooms, water reservoirs, infirmary, etc.) in proportion to the larger size of the fortification and, sometimes, observation posts and casemates for machine guns. The batteries were called "Sempre Pronte" (Btr S.P. was the abbreviation used) because they had to be always "ready", at very short notice, to open fire on the established targets. Normally, the underground batteries provided flanking fire for the "opere" of the resistance position, and for the roads and major passes, and in normal circumstances they almost always fired towards the frontier and the enemy.
- *The underground shelters*, which could be for troops engaged in a counterattack (units brought up following mobilisation to reinforce the position) or for watches in the open-air (units with two or three weapons positioned close to the two entrances to monitor the secondary approaches or those that could not be seen by the Resistance position); they were dug into the rock and consisted of two entrances, a large chamber and a number of secondary chambers. They were generally positioned behind the fortifications, below the ridge, to defilade them against from enemy fire.
- *The observation posts* were sited along the ridges, offering the best viewing positions and allowing information to be passed to the various artillery batteries regarding adjustments to lines of fire and sightings of enemy movement; the observation posts were constructed underground or in concrete, with an entrance and underground chambers.
- *The barracks* were positioned close to the fortifications wherever possible, but protected from enemy fire and sheltered behind higher ground. The soldiers in the G.a.F. (Border Guards) worked on shifts which involved manning the fortifications and then spending two or three days a week in the defensive barracks, where they carried out patrols and light tasks.
- There were numerous *open-air batteries*, although the most important were those underground; these were divided into three groups: "Sempre Pronte" (Btr S.P.), "Approntamento Accelerato" (Btr. A.A.), and "Approntamento Normale" (Btr A.N.), depending on the speed with which they could enter into action. In particular, the "Sempre Pronte" batteries had small barracks and stores close to the emplacements and were responsible for firing onto important sectors, such as roads and parts of the "Posizione di Resistenza" (P.R.).

The fortifications were positioned to make the best use of the terrain and its unevenness, while guaranteeing the necessary field of fire for the weapons, and they were distributed particularly widely, in order to control all the tracks, passes and roads that could be used by the enemy. The entrances were usually positioned at the rear, sheltered from direct fire, and they were fitted with different models of reinforced doors depending on the location and any visible targets. The placements (also referred to as "malloppi") were sunk as far as possible into the ground, so that only the embrasures emerged and part of the roof. The concrete was approximately three metres thick and protection was guaranteed by an embrasure plate, which left only minimal space to manoeuvre the weapon, that entirely covered the front of the casemate, and closed on top by a double layer of girders.
All the structures on the surface (entrances and blocks) were concealed as far as possible using clumps of grass, stones or structures that mimicked the rock, and even farm buildings, in order to hide them from the French. Precautions (palisades, walls, trellis screens, etc.) were also taken while the placements were under construction to prevent any French spies from following the progress of works.

The system of fortifications along the whole Alpine arc was divided into sectors, each of which was entrusted with controlling a section of the frontier that could managed by a single division; in the event of mobilisation, the latter would be used to reinforce the normal garrisons in the fortifications (the Border guard, or Guardia alla Frontiera). The sectors were then divided into subsectors (or segments with different characteristics) and lastly into "capisaldi" (strongholds); each of these had a specific task, such as to barricade the Aurelia and the

coastline (1st stronghold Castel d'Appio), or to control the track from Saorge (6th stronghold Muratone), and comprised a number of "opere", shelters and barracks.

The province of Imperia included two "Settori di Copertura" (Sectors of Cover): the 1st Sector (*Bassa Roja*), which ran along the watershed between the Nervia stream and the River Roja, along the high ground between the latter and the River Bevera, around Monte Magliocca and down to the sea, and the 5th Sector (*Media Roja*) which wound along the ridge between Testa d'Alpe and Cima di Marta. The 2nd Sector formed a block across the Upper Roja Valley and lay in the province of Cuneo.
The 1st Sector was meant to block the Aurelia, running along the coast in the direction of Ventimiglia and Sanremo, and trunk road no.20 which crosses the Tenda Pass, from Breil to Ventimiglia; the 5th sector, on the other hand, was meant to guarantee control of the ridges between Marta and Testa d'Alpe, and to prevent the enemy from crossing into the Nervia, Argentina, Impero and Tanaro valleys.

The troops who manned these fortifications belonged to the G.a.F., the Border Guard, which was set up in 1934[4]. As in the case of other special military units, the G.a.F. was no stranger to the rhetoric of the time, as shown by its mottoes: "DEI SACRI CONFINI GUARDIA SICURA" (safe guardians of the sacred boundaries) and "RESISTERE AD OGNI COSTO" (resist at all costs). Both sum up the tasks of this particular company, which was defined as being *static* because they remained at high altitudes, even during winter.
The Border Guard was divided into three special groups: artillery, infantry and engineers in order to meet the need for defence, as well as those relating to the fortifications themselves and their technical systems. The soldiers had to be constantly on guard and ready to face any surprise attack, even without an official declaration of war; together with the Finance police, the Royal Carabinieri and the Border guards they provided constant surveillance of the frontier and were ready to intercept any enemy aggression. In fact, each stronghold contained the required number of troops to man the fortifications, the underground batteries, and the "sempre pronte" batteries. Later, following mobilisation, the garrisons would be gradually reinforced: battalions of "Camicie Nere" (blackshirts), companies of machine gunners, and lastly troops from the infantry divisions would reach the various areas and complete the defensive line-up.

This is what happened in June 1940 (after earlier attempts to activate the system in 1939) when Italy entered the war to fight alongside Germany, intending to deliver a fatal blow to France and to obtain the few thousands of casualties that, according to Mussolini, were required in order to sit at the victors' banquet. During the Battle of the Alps, which lasted only 15 days, the fortifications were never actively engaged because the clashes took place entirely on French territory and did not directly involve the "opere". In fact, after waiting expectantly for a few days, during which other sides kept a defensive stance, Mussolini decided it was time to launch an attack and asked the Chief of Staff, Marshal Pietro Badoglio, to order an offensive across the Western Alps.
After having unsuccessfully tried to delay the attack for a few days, in order to prepare the operations and move many units and batteries which, until then, had been kept in defensive positions, Badoglio ordered the troops to move up to the frontier and launch an attack along its entire length, focusing in particular on three directions (R= riviera, M= Maddalena and B= Piccolo San Bernardo), where it was thought that a breakthrough had the highest chances of success.
Some G.a.F. units were used as spearheads in vanguard operations because of their expert knowledge of the area; in Media Val Roja, on the Balcone di Marta, fifty of these so-called "arditi" (daring men), selected from the troops garrisoned at Marta, led a number of units from the Modena Division in an attack across the Bassa di Giasque, towards Cima d'Anan; here they were stopped by the decisive reaction of the French artillery, in particular from the Maginot fortification on Monte Grosso which fired about 3,000 75-mm shots on Bergerie d'Anan, preventing any further progress towards Fontan and Breil.
After the Battle of the Alps, garrison life continued around and inside the "opere", and the troops of the G.a.F. and other specialised companies were content not to be sent to other battlefields, in spite of the summer heat or, as in 1941, the freezing temperatures. Finally, on 8 September 1943 all fortifications and barracks were abandoned; they were then plundered, first by civilians, who removed all food, clothing, pans, and anything else that might be useful and which was in short supply, and then by the partisans who took any remaining weapons and ammunition, and whatever had been left in the way of blankets, telephones, etc.
After the end of the War, in 1947 the Treaty of Paris decreed that the frontier should generally be moved onto the watershed, thus leaving the Upper Roja Valley, the Valle Stretta, Moncenisio, Monte Chaberton and other small Alpine regions to France; moreover, any fortifications left on Italian territory after the frontier had been

[4] The Royal Decree that approved its creation was only issued in 1937, but was enforced retroactively.

moved had to be destroyed so that they would not be an impediment to French retaliation against possible claims made by the Italian state.

The 1st "Settore di copertura G.a.F." ("Vallo Alpino")

The 1st "Settore di copertura" of the Border Guard *Bassa Roja* was the unit responsible for defending the land border with France between Testa d'Alpe and the sea. The sector included very varied terrain: from cliffs that plunged into the sea to the woods in the Abegliotto area, and the bare rocky hillsides of Magliocca and Colombin.
In short, the sector had to achieve three aims:
a) prevent access along trunk road no.1 (known as the Aurelia) from the south;
b) prevent access along trunk road no. 20 across Colle di Tenda and Val Roja, to the north;
c) lastly, control the various paths that, leading off the two main routes, climb the slopes up to the Roja Valley between Monte Maltempo and the seaside, and towards the Nervia Valley between Monte Forquin and the mouth of the Fiume Roja.

The sector included: two subsectors: 1/A Right Roja and 1/B Left Roja; three strongholds and a total of 200 "opere", divided into 114 resistance centres, firing centres and "opere", 2 underground batteries, 4 shelters for open-air placements, 28 shelters for counter-attack troops, 7 passive blockades, 15 barracks and artillery shelters. The defensive system comprises two main lines: a *first advance line*, which from the sea south of the Villas wound up to the Magliocca, and then descended to block the narrows on the Bevera River, and then climbed up Monte Pozzo – Monte Maltempo, before descending again to the Roja Valley south of Airole, joining the *first rearguard line* below Monte Abegliotto; from Ventimiglia this line followed the left bank of Roja river, climbed up Monte delle Fontane, running along the ridge from Cima Tramontina, Monte Erisetta, Monte Abegliotto, Monte Colombin, Monte Forquin, Cima di Cremo to Testa d'Alpe.
Lastly, a *spur* blocked the Roja river from Franchi (below Magliocca) to Monte delle Fontane.
The fortifications were positioned halfway up the slope, or slightly below the ridge (facing France), in order to be covered from enemy fire and control the paths and adjacent fortifications. Among the main fortifications (mainly underground) there were small placements and monoblock fortifications made by the soldiers themselves at times of tension and mobilisation to fire on those valleys and paths that were initially not under control. The shelters created behind the lines (100 – 200 metres to the east) were used to shelter moving troops from possible enemy shelling.
The sector joined with 5th "Settore di Copertura G.a.F." at the level of Testa d'Alpe.

In this sector, the **fortifications on Monte Forquin** are the best preserved. The fortification known as "opera 3" is set into the rock cliff, on the southern slope of the mountain; it is a small resistance centre built in 1935 and consisting of an entrance, a tunnel with a dormitory and several chambers, as well as the machine-gun emplacement. It controlled the path heading east from Libri and passing below the summit of Forquin. The FIAT 14/35 machine gun was mounted on a carriage and protected by a reinforced plate weighing 800 kg, as well as by two metres of concrete and the thickness of the overhead rock. The entrance faces east, sheltered from possible enemy fire; beside the reinforced door (now no longer in situ) is the armoured air vent (for the ventilation system) and the chamber occupied by the generator, which was built later. Inside, there is still a sealed door although all the other fittings and equipment were removed in 1947.
The observation post, which also dates from 1935, is sited on the summit of Monte Forquin and was used to send firing details and corrections to the artillery. From here, you get a clear view of the Lower Roja Valley, of Olivetta and the road to Sospel, as well as a number of important targets in the event of a battle. The results of shots could be sent to the batteries by telephone, as well as possible corrections to range or direction, and news of possible target hits, and whether the type of shot should be repeated.
Among the other fortifications in the sector it is worth mentioning: the batteries on Monte Abegliotto and Monte delle Fontane, now partially destroyed and therefore not accessible (although the underground tunnels and some parts of the placements are still intact), which controlled (with four cannons) the Resistance Position and trunk road no.20; the length of the tunnels and the number of underground chambers made this the largest complex in the sector. Also the "15000 type" fortifications, Dioscuri and Dandolo, located below Colla di Bevera, which were also very extensive (of the latest generation, dating from 1939): these are still intact, but the entrances and placements are closed by thick concrete walls. Their weaponry consisted of machine guns and anti-tank mortars.

The 5th "Settore di copertura G.a.F." ("Vallo Alpino")

The 5th *Media Roja* Sector covered the front from Testa d'Alpe to Monte Toraggio, and wound across mainly wooded and gently sloping territory; only at the two extremities, south of Arpetta and at the northern end on Monti Bauso and Toraggio, was the morphology predominantly rocky.
The aim of the sector was to prevent any infiltration from the various tracks that climbed up, from Breil, Sorge and Fontan, to the passes along the ridge.
The sector was divided into the following subsectors: V/A Muratone and V/B Marta, and comprised thirteen strongholds with a total of 53 "opere", 2 underground batteries, 5 shelters for open-air placements, 15 shelters for counter-attack troops, 8 barracks and artillery shelters.
The fortifications were laid out as two parallel lines: the *first line* ran along the ridge from Testa d'Alpe to Arpetta, Monte Cimonasso, Monte Lega, Toraggio as far as the Balcone di Marta (where sector joined with the II Alta Roja Sector); the *second line*, running behind the first, was designed to stop any breakthroughs and wound through the woods between Testa d'Alpe and Monte Lega, blocking the valleys of Grugni and Genseo and the ridge between Monte Giardino and Scarassan. The peculiar feature of this second line was the anti-tank blockade at Scarassan, consisting of two concrete walls and a series of manholes into which a triple series of girders could be inserted, if necessary, to stop any enemy armoured vehicles.
In this sector, almost all the fortifications have been perfectly preserved (obviously without any fixtures and locks), but after the War only some were stripped of their girders and armour plating.

The key point of the entire zone was the **Balcone di Marta**[5] (the western foothill of the Cima di Marta), a real balcony facing west, towards the Roja Valley, which became the site of the largest fortification in the Western Alps forming part of the Vallo Alpino, and in absolute terms, one of the largest fortified camps. The complex was built over the earlier fortifications, confirming the validity of the choice made in 1880 and the theory according to which a mountain position retained unaltered strategic and military importance over the centuries. As mentioned earlier, the fortification controlled trunk road no. 20 across the Colle di Tenda and Roja Valley, as well as various other roads from France. Moreover, given its altitude and vicinity to the frontier, it could even fire on the French positions in Authion where, in 1940, a new placement forming part of the Alpine Maginot Line was being built on the slopes of the massif (at Plan Caval).
The placement is built entirely underground; from the summit of the "Balcone", the main tunnel follows the narrow rocky ridge, passes below the saddle at an altitude of 1998 m. and, passing the "Castello" (a rocky promontory off the "Balcone"), emerges on the other side of the ridge to overlook the Bassa di Giacque, the track leading from France and the border lying only a few dozen metres away.

The complex is divided into three parts:

- the underground battery: this occupies the highest part of the fortification, under the summit of the "Balcone", and consists of two entrances (one reserved for the battery, and one for the "resistance centres" below), service rooms (generator, ventilation, stores, latrines, etc.), connecting tunnel, troop shelter, powder magazine, observation post and four artillery casemates. The four 75/27 cannons model 906 (installed underground) were trained onto the Cima di Durasca and controlled the "Posizione di Resistenza" as far as San Dalmazzo di Tenda and trunk road no.20, because the latter was passable even in winter; the battery was of the "*sempre pronto*" type, namely always ready to fire within a few minutes of receiving orders.
- Resistance Centre 35 bis: this was positioned halfway up the slope, on the north-west face of the "Balcone"; it was equipped with two FIAT 14/35 machine guns which controlled the path from Bassa di Giacque, the saddle and the uneven slopes on the promontory, from two casemates whose forward fire was strengthened by heavy plates; the two embrasures opened onto the rocky cliffs that plunged into the valley below Marta and the Bendola river; inside the tunnels branch off the main gallery, halfway along the connecting stairs between the battery and "centro 35" below, before reaching the placements; these lead into the shelters and the ventilation rooms, the store, etc.
- Resistance Centre 35: this is the lowest part of the complex and is built under the "Castello"; it was equipped with three FIAT 14/35 machine guns, one of which was trained directly onto Bassa di

[5] Detailed information on the argument is given in the book "IL VALLO ALPINO A CIMA MARTA> Storia, fortificazioni e sentieri a ridosso della frontiera tra Collardente, Cima di Marta e Monte Toraggio" by Davide Bagnaschino, published by Atene Edizioni - Arma di Taggia (IM).

Giasque and the track crossing the frontier; the other chambers include powder magazines, stores for water and food, and the dormitory.

The different parts are connected by a long tunnel that, from the left-hand entrance, leads to the last embrasure in "Centro 35" after running along 600 metres and dropping 100 metres down the long stairs.
Almost all the other fortifications in the area are interesting and easily accessed, in particular the underground Battery of Monte Lega which controlled the southern part of the sector (Subsector V/A Muratone), in which it was the most extensive complex.

The Battery of Monte Lega (also known as 604th Batteria Sempre Pronta) was built between 1932 and 1935 on the summit of the mountain after which it is named, at the northernmost tip of the Subsector V/A Muratone. In terms of its construction, it conformed to Circular 200 from the chief of staff.
The placement is equipped with four 75/27 cannons model 906, two FIAT 14/35 machine guns and two light machine guns. The four cannons in the battery controlled the entire ridge from Passo Muratone to Arpetta, protecting the infantry placements ("centri di resistenza") and those blocking the various passes, while the two light machine guns provided cross fire with Resistance centre no.4 in Sanderan, on the north and north-west slopes of the mountain, protecting the casemates.
The battery consisted of two entrances (armed with a light machine gun), a series of tunnels (off which opened the various chambers used for latrines, powder magazine, food and water stores, etc.) linking the domitories and the powder magazines with the four cannon placements and the two machine gun placements.
The four artillery casemates contained 75/27 cannons model 906, using an underground installation (as in the battery at Balcone di Marta). The placements, measuring two by four metres, were closed at the front by a large armoured plate which was 10 cm thick, to which the cannon carriage was anchored; as the rock does not rise sufficiently out of the ground (unlike Marta), the concrete blocks used to protect the placements are almost entirely above ground and gently rounded. Above the roof, it is still possible to note the exhaust shafts for fumes and foul air.

Like the other fortifications of the Vallo Alpino, the battery on Monte Lega did not see active service in the Battle of the Alps in June 1940. In fact, the field of fire covered by the weapons was entirely in Italian territory and was purely defensive.
The observation post stands on the summit of Monte Lega, where it is not connected to the battery. It was built in 1935 with the aim of guiding the shots of both this and other batteries located in the open air. From here you can see, at a glance, the entire situation on the front, ranging from Toraggio to Arpetta and sweeping across the entire Media Val Roja, including very distant peaks like Rocca dell'Abisso, the Massif of Authion, Cima del Diavolo, Monte Bego, etc. Looking towards France, on the north-western spurs of Monte Lega, you can see a few shelters and fortifications forming part of the first line, located below the battery.

We should also mention Monte Cimonasso, the site of the "Posizione di Resistenza" with infantry placements; in particular, the largest consists of the combined resistance centres no.11 and 12, a complex with about four hundred metres of tunnels and as many as nine blocks (an observation post in a metal turret, six machine gun placements of which three in metal casemates and three in concrete casemates, plus three entrances), two domitories and several service chambers.
The fortification controlled the "Fascia Sagrà" zone (now in French territory), crossing machine gun fire with the nearby resistance centres to create a blockade, which was deemed to be impassable, along the slopes facing west and north where a line of barbed wire ran towards the front edge of the "Posizione della Resistenza".

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