CENTRAL CHILE (Between lat. 31°- 35°S.)

The principal section of this most important stretch of the Andean chain (between lat. 32°30' - 35°S.) is about 300 kilometres long by fifty kilometres wide. It is bounded to the north by Aconcagua; to the south by Volcàn Tinguiririca; to the west by the cities of Los Andes, Santiago, Rancagua and San Fernando; and to the east by the Chile-Argentina frontier, which follows the watershed on which stand the highest peaks. Inside this area are many exciting ranges of rock and ice peaks between 3000-5500 metres high. Ease of access, a pleasant Mediterranean climate and the added attraction of a five-month skiing season have combined to make this region, which in character is like the Alps on a grand scale, the most highly developed of all the Andes. The whole region has been described as resembling the countryside around Innsbruck. The frontier peaks are described first.

In the extreme north of the area is the Macizo Nevado de Leiva, a small but interesting group of peaks 4000-5000 metres high lying astride the frontier and located some sixteen kilometres west-north-west of Aconcagua. Secondly, there is a little group of rocky peaks headed by Cerro Parva, located just north of Portillo on a spur running south-west from Los Tres Hermanos on the frontier crest. Next the international boundary crosses the Transandine road just east of Portillo, the leading ski resort in the Andes. Between this point and Nevado Juncal are the peaks Leòn Negro and Leòn Blanco. There follows the Cordillera Ferrosa comprising Nevado del Plomo, Cerro Tronco, Alto del Coironal, Cerro Reichert, Cerro Solari and Cerro Riso Patrén. At the Portezuelo del Morado the main crest makes a Sbend, turning first north-east to Chimbote and Polleras, which is just inside Argentina; then south-east to Tupungato, the highest peak in the region, followed by Alto and Piuquenes. Between Paso de los Piuquenes and Paso de Nievas Negras are Marmolejo and Volcàn San Jos,. The southern half of the region gradually marks the end of the high Andes before the transition to the Andes of Patagonia. First come Castillo and Maipo. South of Maipo the countryside becomes wooded, with dense vegetation which induces considerable precipitation and a lower snow line. In this sector are the Picos del Barroso, El Palomo and Tinguiririca.

Returning to the north of the region, and the peaks inside Chile, firstly comes the Grupo Alto del Rio Blanco, headed by Leòn Negro and Leòn Blanco. South of this group is Nevado Juncal which is the point from which springs a great network of peaks reaching almost to the streets of Santiago. To the north-west, bounded by the Rio Blanco and Rio de los Leones, is the Rio Blanco group, dominated by Alto de los Leones, one of the cordillera's most formidable peaks, itself overlooked by Nevado Juncal. To the south-west are the high peaks which dominate the Santiago skyline, principally El Plomo, Altar and La Paloma. Between Santiago and these peaks lies the pre-cordillera district known as Las Condes, including the ski resort of Farellones. Immediately east of Santiago is the sub-Andean Sierra del Ramòn, rising to 3240 metres; from here to Tupungato on the frontier ridge are the valleys of the Rio Colorado and its tributaries. This sector includes Aparejo, one of the many Chilean 'Matterhorns'. A little further south is an important area in the vicinity of Marmolejo, the Rio Yeso and the Rio Volcàn, which are tributaries of the Rio Maipo. Some of the best climbing in the cordillera centres on Cortaderas, which is about twelve kilometres west-north-west of Marmolejo, and the adjacent peaks. Between Maipo and Tinguiririca lies an area of rugged peaks around 4000-5000 metres high, approached via the rivers Pangal, Cachapoal and Tinguiririca. These ranges include the Paredones ('Tall Walls') and Punzones ('Piercing Spires'), offering some of the best rock-climbing in South America, not unlike the aiguilles of the Mont Blanc range. The Cordillera Central comes to an abrupt end in the rocky peak of El Brujo and the volcano Tinguiririca; further south isolated

volcanoes rise above a land of forests, valleys and lakes, marking the transition to the Patagonian Andes.

In the peak lists below, peaks are listed from north to south, and frontier peaks are distinguished from others, as far as possible.

Selected General References

Echevarria, E. 'Chilean Cordillera Central'. AJ, 64 (1959): 228-36; 65 (1960): 53-61. Map.

Kurz, M. 'Chilenisch-Argentinische Anden'. BdW, 3 (1948): 361-9.

----. 'Erkundung und topographische Erschliessung des Juncal-Tupungato-Massives durch Robert Helbling, 1908-1912'. BdW, 3 (1948): 389-94. Exploration of this area from the Argentine side by the Swiss Robert Helbling, who climbed with Reichert.

Lliboutry, L. Nieves y glaciares de Chile: fundamentos de glaciolog¡a. Santiago: Ed.Universidad de Chile, 1956. Map. Important reference work.

Pfenninger, O. 'Die Chilenische Zentralkordillera'. BdW, 3 (1948): 439-46.

San Romàn Herbage, G. Guia de excursionismo para la Cordillera de Santiago. Santiago: The Author, 1977. Hiking guide to the valleys and passes east of Santiago as far as the frontier.

Northern Massifs

The Macizo Nevado de Leiva is a small but interesting group of 4000-5000-metre peaks lying astride the international frontier and is located approximately sixteen kilometres west-north-west of Aconcagua at the head of the Cajòn del R¡o Leiva in the vicinity of the border passes Portezuelo Leiva and Portezuelo Cuevas. The first visit to the area was made in 1953 by a Chilean party who ascended the Rio Colorado tributary of R¡o Aconcagua to Portezuelo Pedro Pablo. A beautiful peak to the north was climbed via the frontier ridge and named Nevado Leiva. Another peak called Tordillo, south-east of the lake of the same name, was climbed after two attempts. The climbers were impressed by the beauty and climbing possibilities of the surrounding peaks. In 1960 a Chilean-Japanese expedition visited the area. Nevado Leiva was climbed again, this time from Portezuelo Leiva. First ascents were made of the twin peaks of Aguja and Torre, characterized by scree and bad rock, Cerro Monjas and Cerro Amarillo, with an extensive field of nieves penitentes, scree and moderately difficult rock. Inside Argentina the party made the first ascent of the north-west summit of Expediciòn. The main peak is further east, reachable via an ice arˆte, but was not climbed for lack of time.

Some thirteen kilometres to the south-west lies the peak of Los Tres Hermanos on the frontier crest. From this peak, on a spur running south-west, is the little group of rocky peaks known as Parva del Inca - La Parva, Cerro Bastion, Cerro Aguja and Cerro Gloria. Cerro Aguja, a fine rocky spire in a complex of striking peaks, was the last to be climbed, the work of W. Itturriaga and J. Simkin in February 1950 after several previous attempts.

Peak List

Expedición: forms part of border massif between Portezuelo Leiva and Port. Cuevas.

- --Frontier summit 5152m: 32°38'S 70°06'W: 1-1960.
- --Main summit: lies to the east in Argentina: not climbed in 1960 for lack of time but reachable via an ice ar^te.

Amarillo 5054m: $32^{\circ}39$ 'S $70^{\circ}08$ 'W: border peak in same group as Cerro Expedición, near Portezuelo R_{io} Indios: 1-1960 via scree and moderately difficult rock with extensive nieves penitentes.

Nevado de Leiva 4660m: 32°32'S 70°07'W: in region of Cajon del R_io Leiva: 1-1953 via south (frontier) ridge.

Tordillo 4620m: adjacent to Nev. de Leiva: 1-1953 at 3rd attempt.

Monjas (Altar del Diablo on map) 4578m: 32°32'S 70°25'W: near Paso de Leiva: 1-1960.

Cumbre Aguja 4300m: 32°30'S 70°16'W: 1-1960 over large, steep scree with very bad rock on

summit tower.

Cumbre Torre 4300m: twin peak of Cumbre Aguja: 1-1960.

N.B. These 2 peaks are referred to as Columpios del Diablo in AAJ 1961:404. They stand above a rock and scree cirque.

Cerro Techado 4650m:

Co.La Parva del Inca 4760m: 32ø45ÒS 70ø11ÒW: 1-1945 via Quebrada Alister.

--Cerro Agustin Varela 3900m:

La Gloria 4697m: 1-1933.

Glorieta 4685m: adjacent to La Gloria: ordinary route from hut.

Brujita 4700m: between Cerros Gloria and Glorieta: 1-1963 from Gloria-Glorieta cirque, reaching top via right-hand knife-edge ridge.

Barile 4750m: between Glorieta and Aguja: 1-1963 via south flank (ord.route from hut).

Cerro Aguja 4600m: 1-1950. Cerro Bastion 4696m: 1-1933.

Peñon Alto 4023m:

Caracoles ('Snails') 4200m: near Portillo ski district: 1-1969.

Selected References

'Expedición chileno-japonesa Andes centrales 1960'. FAEC, (1960): 57-117. Includes Leiva group.

Main Range

One of the earliest scientific visitors to this part of the Andes was the naturalist Charles Darwin who, in March 1835, travelled from Santiago up the Yeso valley, over the Piuquenes and Portillo passes to Mendoza, returning via the easier Uspallata Pass just south of Aconcagua. This trip, mainly made on horseback, lasted twenty-four days and resulted in the first scientific geological survey of central Chile. Other scientists, employed by the Chilean government, were the French and Polish geologists Amadée de Pissis and Ignaz Domeyko, who was the first to attempt the ascent of Tinguiririca. In 1831 F.L.J. Meyen almost reached the crater edge on Maipo, a climb which was completed by the German mountaineer Paul Güssfeldt in 1883. In 1895 the Germans G. Brand and R. Lück climbed El Plomo, the peak on which was subsequently found the mummified body of a sacrificial victim. In 1897 Stuart Vines and Mathias Zurbriggen, members of Edward Fitzgerald's Aconcagua expedition, made the laborious but easy ascent of Tupungato. By this time the Chilean Boundary Commission had been set up, under the direction of the eminent Chilean geographer Luis Riso Patròn, charged with mapping the boundaries with Bolivia and Argentina, a task which filled the years 1895-1909. Riso Patròn himself participated in the field-work, helping to place iron markers (mojons) on border passes upto 5000 metres high and, in the Cordillera Central, ascending the volcano Tupungatito. In 1924 Riso Patròn published his famous Diccionario Geogràfico de Chile, a work of great merit and erudition which contains 28,215 Chilean geographical names.

In 1906 the German scientist Frederick Reichert, who worked for the Argentine government, turned his attention to the section of the Andes lying between Aconcagua and Tupungato. His previous

expeditions had been to the Puna de Atacama, and in 1914 he was to make the first of his visits to Patagonia. During the intervening years, usually with the Swiss engineer Robert Helbling as his climbing companion, he discovered, explored and mapped the Juncal group, which has some very large glaciers, as well as making first ascents of several high peaks, including Leòn Blanco, Cerro Doris, Nevado del Plomo and Nevado Juncal. Further south he explored and climbed Polleras and Tupungato; all his expeditons were made from the Argentine side.

Reichert and Helbling were enthusiastic climbers. Leaving their mules and arrieros in camp, the pair would carry their sleeping-bags and other gear up as high as 5500 metres, where they would bivouac in the intense cold. Next day they would try for their peak. They climbed together but had an 'each man for himself' agreement - if one man had to turn back, the other went on; if one wanted to stay behind for a second attempt, the mules and men were divided between them. The ascent of Nevado Juncal was one of their major climbs. After several days of careful reconnaissance, they left camp at an altitude of 4200 metres and, after overcoming enormous seracs and walls of ice, bivouaced under an icefall at the foot of the north ridge (c.5200m). After the usual very cold night, they gained the ridge up steep snow and through a complicated system of crevasses. The ridge was followed without difficulty to the summit which was reached in mid-afternoon. Descending through the night they arrived back at their tent twelve hours later.

At this time European settlers in Chile were beginning to take up the sporting challenge of the Andes. In 1912 two Englishmen, H. Trewhela and R. Temperley, together with the Italian Felix Mondini, climbed La Paloma, one of the peaks seen to such advantage from the streets of Santiago. Shortly before, the Germans had started a sports organization, the Deutscher Ausflugsverein, in Valparaiso and had begun making ascents. In 1924 the Germans created another section of the Deutscher Ausflugsverein in Santiago, while in 1922 the organization had commenced publication of Andina, the first South American mountaineering journal. In 1933 the Club Andino de Chile was set up, also a German creation; thereafter Chileans gradually became active in the sport and the publicity given to the first ascent in 1939 of the difficult Alto de los

Leones did much to popularize local mountaineering. Today there are many climbing and skiing clubs, most of which are affiliated to the national organization, the Federaciòn de Andinismo y Excursionismo de Chile which is responsible, among other things, for the provision of mountain huts.

In the years between the wars Sebastian Krűckel, Hermann Sattler, Albrecht Mass and Otto Pfenniger were among the active local climbers. Together with others they notched up a number of first ascents, especially that of Marmolejo in 1928 (a round trip of thirty-seven hours from high camp) and such peaks as Meson Alto, San Jos, Cortaderas, Piuquenes, Morado, Cerro Riso Patròn and Cerro Piràmide. The first ascent of Morado, a fine rock and ice peak in the Cortaderas group, was made at the end of 1933, after numerous attempts from both north and south. Eventually Krűckell and Pfenniger succeeded in a bold attack via the north-west rock ridge which was very shattered and subject to exceptionally severe stone-fall. In 1942 three Chileans climbed the south face. The Panimàvida glacier, the steepest of all, was ascended for the first time in 1975 by Pedro Rosende and F. Vivanco. In the last 600 metres the slope averaged 60° on almost crystalline ice.

The first ascent of Morado had been one of the main objectives of the 1934 Italian 'Crociera alle Ande' ('Cruise to the Andes') expedition organized by Count Aldo Bonacossa. On arrival in South America, Bonacossa, Binaghi and Gervasutti diverted to Tronador to search for two missing Italian climbers, while other members of the party climbed Aconcagua and attempted Alto de los Leones,

another highly-sought prize. They were unsuccessful in this, but did manage to make a new route on Nevado Juncal. Unhappy about the outcome of the expedition, Gervasutti and Binaghi remained behind after the others had sailed for Italy and later made two first ascents - a rocky peak near Morado which they christened Punta Italia, and Cerro Littoria, in the El Plomo group, which they climbed by the difficult west face.

Post-war, notable ascents in 1954 included: Alto del Yeso; Cortaderas, south face; Corona, east face; and the first ascent, from the Chilean side, of Nevado Piuquenes. The most important ascent in 1957 was the first ascent of Juncal Chico; with two intermediate camps, the Chilean Manuel Bazan and the Czech Radko Schneberger succeeded in the ascent, after difficult climbing up rock and steep snow to a col which gave access to the summit. Yet another attempt to climb Chimbote failed some thirty metres from the top, as had all others. There was a fair amount of activity in the 1960s, beginning with the first ascent of El Tronco in February 1960. This peak had repulsed six attempts in four years, and was eventually climbed by traversing from Cerro Riso Patron. During the 1960-61 season a new and difficult route was made on the south face of Falso Morado (Morado Sur); this required two attempts and four days of route engineering. The next season a group from East Germany made the first ascent of Punta Hoff in the Alto del Yeso region; their attempt on the unclimbed north-west face of Marmolejo was frustrated by adverse weather and bad ice conditions. In 1964 new climbs were made in the Plomo and Leòn Negro groups. In January 1970 the first new route was put up on the great peak of Alto de los Leones, first climbed in 1939, and notorious for its steep unstable walls. This time a large team from one of the mountain regiments attempted two routes - the normal way and a variant to the right, i.e. north face and north gully. The route was rated Grade V, with a short pitch of VI on which a rope was fixed.

Peak List

South of Transandine road to Juncal

Santa Elena 5240m: 1-1939.

Navarro 4560m: just south of Las Cuevas on frontier: 1-1963.

--Sur 4650m: 1-1903 by Meyendorff party?

Los Gemelos: west and east peaks both c.5200m: 1-1903: E. peak from Qba. Blanca-1979: W. peak via S. glacier-1979: S. face-1981: W. peak from Qba Blanca-1986: E. peak N.E. face-1986.

Aguja Nacimiento 3850m: highest in group of rocky needles between Juncal Norte glacier and Estero Monos de Agua: 1-1951.

Mono Verde 4500m: summit of decomposed rock at bottom of Cajòn de Monos de Agua: 1-1955.

L, on Negro 5151m: lies inside Chile: 1-1951 to north summit after turning rock turrets and over steep scree mixed with ice, fairly difficult: S. summit ten days later, different climber-1951.

Cabeza del Inca:

--La Pera 4000m: 1-1976.

Cerro Gustavo 4788m: frontier peak 3 km N. of L, on Blanco: 1-1955.

L, on Blanco 5195m: 32°59'S 70°02'W: N.W. of Juncal: 1-1911: W. face-1977.

Cola de Mono 4830m: west of Leòn Negro: 1-1963.

Valeria 4800m: 1-1957: S. ridge-1963.

Zool¢gico 4750m: west of Leòn Negro: 1-1963.

Punta Baja 4050m: 1-1964 via Glaciar del Rio Plomo. Andeski-V 4850m: 1-1964 via Estero Monos de Agua. Punta Juan Palomino 4250m: 1-1964 via Monos de Agua. Punta Juan Gandolfo 4200m: 1-1964 via Monos de Agua. Alto del Rio Blanco 5228m: 1-1908 easily via Glaciar Alto del Rio Blanco: Also via Glaciar del L,on Negro and south ridge, fairly difficult-1940s?

Mono Blanco 4800m: 1-1945. Reported erroneously as second ascent of Leòn Blanco.

Alto de la Posada 4256m: 1-1956: From E. -1962.

Rafael Saavedra 4300m: in the Becker group: 1-1961.

Becker 4250m: 1-1962.

N.B. This group is usually referred to as Grupo Alto del Rio Blanco. See also the easterly extension in Argentina.

Selected References

Keuck, C. 'Segunda ascensión del Cerro León Blanco [sic]', RA, n.52 (1946): 25-27. Actually Mono Blanco.

Reichert, F. La exploración de la alta cordillera de Mendoza. Buenos Aires: Benard,1929. Pp.199-223.

Juncal to Paso del Tupungato

(a) Frontier peaks

Nevado Juncal:

- --Cumbre Internacional 6110m: 33ø03ÒS 70ø 06ÒW: 1-1911 from Argentina, i.e. the S.E.: From Chile via N.W. glacier (possibly incomplete)-1934: in 1951 the lower part of the hanging glacier on the Chilean route disintegrated and subsequent ascents were made via the bad rocks to the east (fairly difficult): E. face-1968 (possibly incomplete): also climbed from N.E.?
- --Cumbre Sur 6000m: this is the summit which dominates the start of Glaciar Juncal Sur: 1-1965 via S. ridge: N. face-1972 by first descending from main summit, then climbing up, all on ice.
- --Cumbre Oeste (Chilena) 5960m: rocky peak: 1-1972.

Cerro de la Amistad 5180m: unnamed peak S. of Juncal Sur, the most important peak between Juncal Sur and Nev. del Plomo: 1-1965 via N. ridge.

P.5540m: hidden peak between Juncal & Plomo: 1-1976 from west.

Cumbre Rasacielos 4900m: N. peak of Juncal massif: 1-1961 direct via N.E. face from Refugio Monos de Agua.

Nevado del Plomo 6050m: has very impressive, savage south-east face over 2000m high: 1-1910 from Argentina: From Chile (via N.W. slopes from Glaciar Juncal Sur?)-1950: E.N.E. face-1965?: N.E. ridge-1978.

Nevado Bolonia 5600m: 33°08'S 70°04'W: between Plomo and Riso Patr¢n: 1-1976 via W. flank. Fine glacier climb and very tiny summit.

Riso Patròn (Bravard) 5750m: in area of big glaciers: 1-1935 from Salto Olivares.

Cerro Tronco 5600m: located east of Gran Salto del Olivares: 1-1960 starting from summit of Riso Patr¢n, believed to be only way of reaching it. Long glacier route, crossing several quite difficult bergschrunds, finishing across scree field.

Cincuentenario 5009m: a rocky promontory in centre of cirque of frontier peaks S. of Tronco and N. of Reichert: 1-1959.

Cerro Reichert (Nevado Silva) 5470m: 33ø14ÒS 70ø02ÒW: 1-1945 probably from Portezuelo de las Pircas along frontier ridge: Via hanging glacier & N. ridge-1959.

Punta Chuncho 4900m: located between Reichert and Paso de las Pircas: 1-1963 via S. ridge from Paso de Las Pircas.

Solari 5329m: 33ø16ÒS. 70ø03ÒW.: S. of Paso de las Pircas: 1-1947 from the pass, then up and down along ridge for 31/2 hrs to summit S.E. of Solari, which was named Roth.

Cerro Roth 5150m: S.E. of Solari: 1-1947 (see under Solari).

Cerro Rabicano 5310m: 1-1939.

--Co.Rabicano II c.5300m:

Morro Rabicano 5050m: S.W. spur of Co.Rabicano: 1-1942.

Catedral (Catedral del Polleras) 5290m: 1-1942.

Chimbote 5683m: rocky peak with various tops and pinnacles: 1-1945, first incomplete ascent. Apparently all attempts have failed c.30m from top, i.e. below final rock tower.

Polleritas (Acad, mico) 5370m: bold, icy peak: 1-1952 fairly easily via N. face.

Cerro Sierra Bella 5340m: 1-1949: S. face-1985, 1000m of ice averaging 50° (passages of 60°-70°) to reach normal E. ridge route 300m below summit.

Pico de Orientaci¢n [del Tupungato] 5005m: located S.E. of Sierra Bella and N.W. of Tupungato: 1-1907: S.face-1985, 450m of snow and ice, averaging 45ø.

Selected References

Fikenscher, F. 'Cerro Juncal (6110m). Erst Besteigung der Chilenische Seite, durch P.Zanetti und G.Boccalatte, 23 Feb.-5 M,rz 1934'. Andina, (1937): 19-30.

Helbling, R. 'Cerro Juncal'. Oesterreichische Alpenzeitung, (1911): 201-11.

Joos, H. 'Nevado Juncal, ascensiones'. LM, n.10 (Jun.1968): 9-11.

Larrain, A. 'Primera ascensi¢n de los cerros Chimbote (5430mts) y "Reichert" (5470mts)'. RA, n.44 (1945): 16-19,23.

Marmillod, F. ÑDeux ascensions dans les Andes chiliennesÒ. LA, 16 (1940): 309-17. Juncal, Alto de los Leones.

Reichert, F. La exploración de la alta cordillera de Mendoza. Buenos Aires: Benard, 1929. Pp.199-223

Stehr, W. 'Primera ascensiòn al Cerro Tronco'. FAEC, (1960): 127-34. See also: Andina, (1960-61): 10-12.

Walz, K. 'Erstbesteigung Cerro Riso Patròn' Andina, (1937): 12-18.

(b) Other peaks

Juncal Chico 5720m: 1-1957 with difficult climbing up rock and steep snow to a col giving access to the summit.

Punta Rabo de la Mona 4600m: located left of Cajòn Monos de Agua and near cerros Mono Verde and Mono Blanco: 1-1977.

La Columna 5660m: N.W. (lowest) peak of Juncal: 1-1981 via North Juncal Glacier.

Cerro Union [de Juncal] 4550m: 1-1951.

Cerro Cachu [C.A.Ch.V.] 4600m: location--Cajòn Alto, Juncal: 1-1951.

El Paso 4150m: S.S.W. of Juncal Chico: 1-1954.

Alto de los Leones (Casco de Bombero) 5445m: 33°00'S 70°50'W: difficult peak: 1-1939 via N. face: N. face, N. gully (variant to the right)-1970: S.W. pillar-1979, very difficult & exposed climb on good rock, 2 bivouacs.

Yeguas Heladas 4790m: 1-1942: First direct ascent via southern hanging glacier, fairly difficult-1979.

Pe¤on de la Perla 4060m: 1-1952? (cairn found on top in 1959): S. spur-1964: Also E. face direct? Ceatolei 4060m: 33°06'S 70°16'W: 1-1948: Shortly afterwards (Jan.1949) the second party ascended the northern screes, avoiding a 350m vertical tower ('Peñon Adriana'), then up slabby ridges and nieves penitentes to the top where they found Bertens' card. Descended by another route on easy scree.

Punta Patricia 4450m: on E. ridge of Cerro El Paso above Juncal Sur glacier: 1-1963 from N.

Alto del Potrero Escondido 5010m: magnificent ice peak, with slightly lower, remote N.E. summit: 1-1946 from camp on a col S. of the peak with difficult traverses across nieves penitentes, glaciers and rock islands.

--N.E. summit 4900m: 1-1976 from Cajòn de Barriga over snow and very difficult ice, averaging 30°-45°.

Punta Fugaz 4500m: near Potrero Escondido: 1-1958.

Alto del Nevado del Plomo 4200m: 1-1957.

Nevado Olivares 5025m: 1-1948: first ascent via Olivares-Gamma glacier-1960.

Picarte 5100m: 33°08'S 70°08'W: 1-1951 via N.W. ridge.

Dorado 5000m: N. end of Picarte massif: 1-1978. Climbed during trip to Nevado del Plomo.

Nevado de Sierra Blanca (Federaci¢n) 5000m: appears to correspond with P.4900 S. of Picarte in the Sierra Blanca of Glaciar Olivares: 1-1951 via N. slope from Olivares glacier, Portezuelo de Picarte. Punta Mirador 4400m: near Cerro Riso Patròn: 1-1959 quite easily via the ridge which separates the Olivares Beta and Olivares Gamma glaciers, then ascent by N. ridge. The ascent was made during a traverse which included the two glaciers, Juncal Sur and Cerro Riso Patròn.

Punta Campamento 4200m: located between Gran Salto del Olivares and spurs of Cord. Ferrosa S.W. of Riso Patròn: 1-1963 from N.W.

Alto del Barriga (Luc¡a-Dinamarca) 4800m?: 33°04'S 70°13'W: 1-1949 via S.W. screes, then up knife edge on final pyramid to rock islands which surround the summit. One gully led to the final glacier and summit cornice.

Punta Perdida 4000m: 1-1958.

La Paloma 4930m: 33°10'S 70°16'W: 1-1912 from Los Bronces by a northern ridge free of ice, and thence by the snowy edge visible from Santiago, the central and highest peaks being attained: Solo traverse of W. ridge-1965: N.E. gully-1974, a very direct route from the N., with difficult ice on final ridge: S.E. glacier-1974, the last and steepest route up the peak, up 55ø slopes.

El Monolito 4274m: closes the N. side of Rinconada glacier on N. ridge of La Paloma: 1-1960 via S. spur.

Bahamonde 4920m: in the Sierra Morada W. of Ndo del Plomo: 1-1935: First approach via Olivares-Beta glacier-1960.

Punta Sheirap 4500m: 2-1964.

Cerro Anes 4936m: N.E. of Cerro Bahamonde: 1-1935.

Altar 5222m: 1-c.1912 possibly by H.Trewhela & R. Temperley: Many ascents from W. and N., the normal route being the W. ridge from La Paloma: First approach via Olivares Alpha glacier-1960: S. face-1980, 1200-metre wall of very poor rock, final 60m Grade VI.

Altar Falso 4650m: S. summit of Altar: 1-1947.

Asociaciòn 4825m: 1-1948.

San Francisco de Los Condes 4270m: W. of La Paloma: 1-c.1896 or earlier.

Cerro Negro [del Olivares] 4915m: 1-1938 by a long circuitous route starting up the W. glacier, then up rocky escarpments, gullies and ice, crossing a col to the E. slope and finishing easily up the N.E. scree slope: Winter ascent on ski-1958: S.W. face-1981: First ascent of 250-metre ice cascade on S. side-1987, adjacent to Glaciar Olivares Beta, 60°-90° (Ruta 'Guru-Guru').

Cerro Iver (Punta Iver) 4700m: 1-1943.

Barentin 4695m: located in chain dividing the Olivares glaciers: 1-1943.

La Perla 4200m (higher western summit): in vicinity of Mina La Disputada: 3-1966 on first ascent of the Arista Donoso (E. ridge).

La Copa 4936m: in vicinity of Mina La Disputada:

Infiernillo 4480,4000m:

Littoria (Uniòn) 5360m: 33°13'S 70°12'W: situated at end of cajòn del Estero del Yerba Loca: 1-1934 from N.W.: S.E. ridge-1946.

Fickensher 5405m: 1-1947, climbed during traverse of Olivares Alpha, Sierra Esmeralda and Esmeralda glaciers.

Esmeralda 4535,4510,4510m: N. (highest) peak 1-1950.

Parsifal 5400m: forms a triangle with Macizo del Plomo and Littoria: 1-1946 via Ventisquero Norte del Plomo and a long traverse to top.

Cerro Osiecki 5000m: 1-1947.

Leonora (Plomo Negro) 5050m: S.W. of Cerro Plomo: 1-1935.

Punta Hermandad 5050m: on ridge descending from Leonora to north of Plomo: 2-1960.

Punta Santiago 5150m: located between El Plomo and Punta Hermandad: 1-1961.

Punta Leonor 4690m: 3-1966 via N. ridge.

Punta Expedición 4950m: on S.E. ridge of El Plomo: 1-1964 from Refugio D'Agostini.

Cerro El Plomo †5430m: 1st recorded ascent-1896: 1st winter ascent-1957: Inca mummy found on southern slopes near top.

Bismarck † 4715m: 1st recorded ascent-1893.

Barros Negros (San Emeterio) 4500m: 33ø04ÒS 70ø18ÒW: near Farellones: 1-1939, probably via W. flank: S. face-1974 up 50° slopes.

P.4012m: W. of Lago Castro in Barros Negros group of rock peaks: 1-1971, solo ascent: another adjacent peak of similar height also climbed.

Selected References

Barrera, H. 'Ascensiòn al Cerro Negro de la Cordillera Morada; circuito rios Colina, Blanca, Olivares y Colorado'. Bolet_in, C.A.Chile, n.10 (Apr.1938): 8-10, 12.

[Chilean Army.] 'Cerro Alto de los Leones: importante ascensión de la "Escuela de Montaña" del Ejercito'. RA, n.91 (1970): 13-15. Two new routes.

Fernàndez, M. La Paloma: se cierra un ciclo. Santiago: Club Nacional de Andinismo y Ski, 1974. 40pp. See also FAEC, (1973-77): 174-91.

Gervasutti, G. Gervasutti's climbs. London: Hart-Davis, 1957. Pp.82-98.

'La Cordillera Ferrosa'. FAEC, (1959): 88-104. Nevado del Plomo, Tronco, Coironal, Reichert, Solari, Riso Patr¢n, Punta Perdida.

Marmillod, F. 'Deux ascensions dans les Andes chiliennes'. LA, 16 (1940): 309-17. Juncal, Alto de los Leones.

Otero, G. 'Ascensión de dos cumbres innominados', RA, n.64(1949): 15-16.

Palacios, J. 'Ascensi¢n Cerro La Paloma, via directa'. FAEC, (1962): 109-18.

Parrines, M. 'San Emeterio o Barros Negros. Primera ascensión cara sur'. FAEC, (1973-77): 170-3.

Piderit, C. 'Primera ascensiòn del Cerro Littoria por el filo sureste'. RA, n.55 (1946): 11-3. Second ascent, new route.

Sattler, H. 'Neujahr 1930 auf dem Gipfel des Cerro Altar', Mitteilungen, DOeAV, 46 (NS) (1930): 249-251.

Vigouroux, I. 'Dos primeras: La Paloma-Alto del Potrero Escondido'. FAEC, (1973-77): 202-5.

----. 'San Francisco: breve historia andinistica', FAEC (1973-77): 97-107.

Paso del Tupungato to Portillo de los Piuquenes

(a) Frontier peaks

Tupungato 6550m: 33°21'S 69°47'W: 1-1897: S. face-1963: Rib between E. face & S.E. face, on difficult rock and ice-1975: S. face variant-1980: 1st winter ascent-1984: S.E. face-1986: E. ridge attempt in 1980 defeated by snow conditions.

Tupungatito 5640m: 33°26'S 69°45'W: 1-1897 to mouth of crater: 1st ascent to highest point-1930: 1st winter ascent-1984.

Nevado Sin Nombre (Bravard) 6000m, 5913m: 1-1944.

Cerro Alto 6100m: 1-1944.

Nevado de los Piuquenes 6017m: 1-1933: First ascent from Chilean side-1954.

Piràmide 5320m: 1-1937.

Mirador de Piuquenes 4630m: 1-1960.

Cerro Puente Alto 4230m: 3-1969 from Paso de Piuquenes.

Selected References

Fitzgerald, E. The highest Andes: a record of the first ascent of Aconcagua and Tupungato in Argentina and the exploration of the surrounding valleys. London & New York: Methuen, 1899.

Heinl, J. 'Muchas gracias amigos!--Bayrisch-Allg,,uer Andenkundfahrt'. Jahr,DOeAV, 100 (1975): 97-102. Tupungato East Face.

Koester, J. 'Primera ascensi¢n al "Nevado Sin Nombre" (6000mts) y tentativa de ascensi-on al Cerro Chimbote (5430mts)'. RA, n.44 (1945): 22-23.

Lűders, J. 'Drei Besteigungsversuche und endgültige Erstbesteigung des Nevado de Piuquenes'. Andina, (1933): 26-8.

Reichert, F. La exploración de la alta cordillera de Mendoza. Buenos Aires: Benard,1929. Pp.199-223.

Zurbriggen, M. From the Alps to the Andes. London: Fisher Unwin, 1899. Pp.197-238.

(b) Other peaks

Yesera 4795m: near Tupungato: 1-?: N.E. ridge-1974, descent to Tupungato glacier.

Alto del Coironal 488m: 1-1958. Coironal Central 4750m: 1-1956.

del Cepo 4280m:

Cerro Klatt 4200m: 1-1948. Laguna 4090m: 1-1945. Cerro Manantial 4180m:

Teniente de los Quempos 4250m:1-1957. Capitÿn de los Quempos 4145m: 1-1936. Sargento de los Quempos 4040m: 1-1943.

Cerro Quilpue 4200m: 1-1966. Punta Rayada 4000m: 1-1969.

Cerro Kobe (Punta Amonites) 5100m?: located up the Yeso valley: 1-1960 from a pass at 4600m & up a ridge.

Cerro Trono 5550m: located W.N.W. of Nev. Piuquenes: 1-1946.

Cerro Bello 5200m: 1-1952 from glacier between Bello & Cuerno Blanco.

Punta Hoff (Bello Sur, Universidad de Humboldt) 5035m: 1-1962.

Alto del Yeso 5155m: 1-1954.

Cuerno Blanco 5030m: 1-1952. This peak and Yeguas Muertas climbed on successive days from camp on extreme edge of Ventisquero Cuerno Blanco.

Yeguas Muertas 4970m: 1-1952: Via right-hand glacier-1964, fairly difficult.

Cerro del Aparejo (Punta Alemania) 4795m: striking cone of grey rock located at edge of Caj¢n Morado on north bank of R_i o Yeso: 1-1950 via S.E. col and ridge descending northwards, descent over snow slopes.

Casa de Piedra (Ricardo Vivanco) 4450m: 1-1956.

Punta Nays 4400m: secondary peak of Casa de Piedra: 1-1958.

Aguja Helada 4701m: 34°45'S 70°03'W: 1-1951 from upper part of the stony Cajòn Casa de Piedra, across screes and up final ridge: W. slopes & N.W. ridge-1963.

Pico Negro 4270m: 1-1948. Punta Andina 4140m: 1-1950.

Punta Negra 4090m: 1-1947 from Quebrada de Casa de Piedra, with steep rock section towards the top: S.W. ice chimney-1951: Traverse from Punta Andina-1954: Ar, valo Route (N. couloir?)-1966: also South Couloir.

Echaurren 4230m: 1-1930, or possibly earlier by local people.

Diente Mayor del Echaurren 4105m: 2?-1964.

Alto de los Amarillas 4185m: 1-1961 from camp at Lomas Amarillas.

Piuquencillo 4050m: Training climb.

Granito 4100m: E.N.E. of Echaurren: 1-1933. Alto de los Bronces 4110m: 1-1939 or 1958?. Punta Aguila Azul 4125m: 2-1960 from El Alfalfal.

Selected References

[Carrasco, P.] 'Ascensiòn al Cerro Capitàn de los Quempos--12/14 de Febrero de 1939'. Boletin, Club Andino de Chile, n.16 (Mar-Apr.1939): 3-4.

'Expedición chileno-japonesa Andes centrales 1960'. FAEC, (1960): 57-117. Includes peaks in above sub-section.

Muñoz, A. 'Primera ascensiòn al cerro "Punta Negra" (4090m)'. RA, n.56 (1947): 22. Grupo Picos Negros.

Rudolph, F. Kakteen, Indios, Andengipfel (die DDR-Anden-Feuerland-Expedition). Leipzig: Brockhaus, 1963. Climbs in Marmolejo area; first ascent of Punta Hoff.

Portillo de los Piuquenes to Maipo

(a) Frontier peaks

Marmolejo Norte 5940m: 1-1953: Traverse from summit to Nev. Palomares inside Argentina-1965. Marmolejo 6100m: 1-1928 via S. ridge, very long climb (37 hours overall): N. face-1982: N. face, new route-1985.

Volcàn San Jos,: has enormous steep-sided crater:

--Norte 5740m: 1-1920.

--Sur 5880m: 1-1931: 1st ascent via W. glacier-1980: 1st ski ascent-1984: 1st winter ascent, during hardest winter for fifty years, four camps-1987: Ordinary route from Refugio Plantat.

Manutara 4540m: located in Cajòn de Colina at foot of Volcàn San Jos,: 1-1951.

Panamericano 4400m: 1-1951, possibly via Paso de Nieves Negras.

Amarillo de Colina 4180m: 1-1934.

Pico Colina:

--Pico Norte de Colina 4160m: 1-1939.

-- Oriente 4440m:

--Sur 4430m:

Punta Portillo 4060m:

Punta Cuba 4200m: 1/2?-1966 from Nieves Negras.

Puntiagudo de Colina (Ba¤os de Colina) 4110m: W. of Punta Portillo de Colina: 1-1935.

Manchado 5375m: 1-1945.

Castillo 5485m, 5080m: steep & difficult needle-shaped peak: 1-1953.

Selected References

Gonzales, B. 'Una ascensión solitaria'. FAEC, (1957-58): 154-7.

Hein, G.von. 'Der Vulkan San Jos'. Andina, (1938): 20-28.

Krűckel, S. 'Die Bezwingung des Marmalejo', Andina, (1928): 26-38?

Rentsch, H. 'Die Colinasgruppe'. Andina, (1943): 47-52. Frontier massif between San Jos, & Castillo.

Zechner, H. 'Cerro San Juan y Marmolejo', ACAB, n.15 (1946): 71-76.

(b) Other peaks

Loma Larga:

--West peak 5380m: 1-1951/2?

--Central peak 5350m: 1-1951/2?

--East peak 5425m: 1-1953 via S.W. glacier. All three summits were climbed.

Cortaderas 5200m: 1-1932, probably from the north (ordinary route): S. face-1954: W. ridge-1965.

Punta Italia 4978M: 1-1934

Punta Chile 5395m: 1-?: 2-1965 via W. ridge.

Punta Brazil 4600m?: unnamed rock peak in Cortaderas group: 1-1960: S.E. spur-1963.

Cerro Mohai 4550m: located in Cajòn de las Placas, opposite hanging glacier on Marmolejo: 1-1954.

Mariesember 4200m: largest of the summits S. of Mohai: 1-1962 via W. couloir.

Punta Equivocados 4150m: one of the summits S. of Mohai: 1-1961, probably via W. ridge.

Punta Camanchaca 4100m: next to Punta Equivocados: 1-1961, probably via S. ridge.

Cerro [Ruperto] Freile 4700m: 1-1942: Glaciar del Mesoncito, W. ridge and southern hanging glacier-1963.

Punta Veleta 4450m: located east of Glaciar del Mesoncito, between El Freile & El Morro Escondido: 1-1963 via S. ridge.

Punta Amarilla 5385m: 1-?: 2-1965 via W. ridge.

Punta La Cuña 4650m: located on ridge leading north to Olivares Alpha glacier: 1-1960.

Morro Escondido 4550m: 1-1959.

Cielo Amarillo (Cerro Yamakawa) 5000m: western spur of Cortaderas: 1-1965 from north.

Mes¢n Alto 5287m: 1-1929 from Estero Cortaderas: S. face-1967: S. face direct, more difficult-1980.

Punta Gervasutti 5200m: south of main peak of Mes¢n Alto: 1-1951 from Cortaderas valley.

Punta Saavedra 5200m: W. point of Mesòn Alto: 1-1953 as for Mes¢n Alto.

Punta Cachureo 4650m: located between Punta Saavedra & Cerro Morado: 1-1966 from Estero Cortaderas.

El Ciervo 4310m: south-west of Mes¢n Alto: 1-1949, probably via S.W. ridge (ordinary route).

--Cumbre Sur 4300m:

Cerro Morado 5060m: fine rock & ice peak: 1-1933 from Cortaderas: From S. (Estero Morado)-1942: S. face from Panimàvida glacier, top 600m 60ø ice-1975, one of hardest climbs in central Andes.

Morado Sur (Falso Morado) 4700m?: southern end of summit ridge: 1-1934 from Quebrada Morales, solo & traverse to main peak: S. face-1961, new and difficult route requiring reconnaissance and 4 days' route preparation: E. ridge-1966.

Cerro Las Placas 4736m: 1-1943: 1st ascent from Valle de la Engorda-1956.

San Francisco 4940m: 1-1945: S. face-1946: Ascent by a difficult 800m ice spur-1967: S. face solo-1978: S. face, 1st feminine ascent-1979: S. face in winter-1980. Five routes in all on S. face.

Mirador del Morado 4320m: 1-pre 1942: W. couloir-1962: S.E. route-1964: S. face-1974 via 2 routes--pillar direct to summit, fairly difficult on good rock, and central pillar.

Cerro Arenas 4450m: on the spur running south from Cerro Placas: 1-1954: S. face (1300m,VI)-1962: S.W. ridge, W. wall (V)-1981; S.W. ridge, variant finish-1981: S. face, direct variation-1981: E. face of E. summit-1985: S. face solo-1985: Winter ascent S. face-1986.

San Gabriel: Cajòn del R_i o Claro, off R_i o Maipo: hard new climbs in the Chilean 'Yosemite' on one of the few granite faces in central Chile: S. face (10 pitches,5.10,A3)-1982: 1st winter ascent-1984. Several routes on S. face of N. tower. The two best were climbed in January 1983, one being the most difficult yet in central Chile.

Cajòn del Rio Claro: Hard new climbs (see AAJ, 58 (1984): 216).

Punta Yamakawa 4400m: Ascent in 1979 via S. face.

Retumbadero Alto (3 or 4 tops):

- --North peak 3750m: Routes on N. & N.W. ridges.
- --Punta Infierno 4100m: 1-1961. May be same as North peak.
- --N.E. peak 3950m:
- --Main peak 4150m: Normal route-Chorro de la Gringa: S. ridge-1975: S. W. wall direct, solo-1981. Dientes del Diablo 4000m: highest point of a series of rocky needles joining peak to Retumbadero: 1-1950.

La Corona 4130m: 1-1950 with interesting gully rock climb to forepeak.

Cerro del Diablo 4270m: 1-1944.

Carreño 4200m: S.E. of La Corona: 1-1961.

Punta Zanzi c.3400m: 1-1952 via S. ridge: N. face (300m), very difficult-1980: N. face, alpine style (5.6-5.9,A2-3)-1984: N. face, 1st winter ascent by new route-1986.

Punta Valdes 4320m: 1-1960.

Cerro Vegas 4130m: satellite of La Corona: 1-1933.

Placas de Lo Valdes: 3 proud, rocky pinnacles:

- --Placa Gris: 1-1966.
- --Placa Roja: needle situated on flank of Los Chiflones: 1-1962.
- --Gran Placa: 1-1967. One of the most beautiful climbs in area.

Catedral de Lo Vald, s 3450m: Ordinary route from Los Chiflones.

Punta Yesera del Catedral 3500m: located N.E. of main summit of Catedral, on ridge descending towards the Yesera: 1-1966 from Los Chiflones.

Selected References

Delgado, D. 'Pared norte de la Punta Zanzi'. FAEC, (1977-83): 45-8. Technically very hard rock climb.

Gàlvez, C. 'Primera ascensi¢n solitaria de la pared sur del Cerro San Francisco'. FAEC, (1977-83): 83-4.

Gervasutti, G. Gervasutti's climbs. London: Hart-Davis, 1957. Pp.82-98.

Kosche, S. 'Erstmalige Besteigung des Morado, über die direkte Südwand'. Andina, (1943): 16-20.

Mass, A. 'Morado. Erst Besteigung'. Mitteilungen, DOeAV, 50 (NS) (1934):96-97,145.

Medina, F. 'Escalada deportiva El Rengo', Anti Suyu, no.2 (1986): 20-21. Rock-climbing crag 130km south of Santiago.

Oyarzùn, G. 'La pared sur del Mesòn Alto'. FAEC, (1968-72): 112-20.

----. 'Retumbadero, arista sur. Primera ascensiòn'. FAEC, (1973-77): 192-6.

Pfenninger, †. 'Der Morado'., Andina, (1937): 2-7.

Tangol, J. 'Cumbre sur del Morado'. FAEC, (1961): 152-60.

Vigouroux, I. 'Cerro Arenas, cara sur'. FAEC, (1977-83): 70-5. Southern spur of Cerro Placas in the Morado group; a severe rock peak with 1330-metre south face.

Maipo Region

Maipo 5290m: F. Meyen almost reached crater edge in 1831: 1-1883: 1st ski ascent-1984, made from Argentina.

Cerro Gorro 4960m: 1-1969. Amarillo de Maipo 4560m: 2-1969. Cabeza de Novillo 4499m: 1-1956.

Selected References

Güssfeldt, P. Reise in den Andes von Chile und Argentinien. Berlin: Gebr der Pàtel,1887. Includes Maipo.

Ranges South of Maipo

By the late 1940s most of the accessible peaks in the northern half of the cordillera, including almost all those of 5000 metres and over, had been climbed. There were lesser peaks still to be ascended, and more difficult routes to be made on the major peaks, but even more attractive was the prospect of investigating the peaks and scenic beauties of that part of the range which lies south of the Rio Maipo. One of the first to explore this region was Evelio Echevarria, a Chilean climber now resident in the U.S.A. and for many years now the leading chronicler of Andean mountaineering.

South of the Rio Maipo are, consecutively, the Pangal, Cachapoal and Tinguiririca rivers; and the numerous peaks (4000-5000 metres) in the region are grouped around the headwaters of these three rivers. By following up the Rio Pangal one reaches the Caj¢n Flores and Flores group to the north; the Rio Mamà to the south; and the Paredones valley which leads to the frontier massif of Picos del Barroso. The Rio Cachapoal has two important sidestreams to the south - the Cipreses valley; and the Cortaderal valley; the main stream leads to a frontier pass. The Rio Tinguiririca has several tributaries to the north - the Portillo valley and the Punzones group; the Rio San Jos, which flows from the great glacier of the same name and the snows of the frontier peak El Palomo; and the Los Humos valley which gives access to Tinguiririca itself. The first traveller into this unknown area was Paul Güssfeldt who, in 1883, went up the Rio Cachapoal and over the main cordillera into Argentina, exploring on the way the Cipreses valley as far as the glaciers. His book contains a 1:500,000 scale map of his routes. In 1900 Luis Riso Patròn also made excursions into these valleys, but his 1:50,000 survey map gives little information about the rugged terrain and he only mentions in his works the 'potent snows' of the Tinguiririca.

In 1949 the experienced Chilean mountaineer Walter Bachmann, accompanied by Luis Covarrubias and Evelio Echevarria, spent a fortnight exploring the upper reaches of the Tinguiririca. Their first objective was El Palomo, the only peak named and located on their map, which they approached via the San Jos, valley. After traversing the lengthy glacier and fields of nieves penitentes they reached

the summit in the late afternoon, only to discover a large cairn erected in 1927 by a Swiss climber, Paul Schucan. However, they had made a new route, and they were able to observe, on the north side of the glacier, a fine range of granite aiguilles adjoining El Brujo. Returning to the main stream, they followed the Portillo valley northwards, which leads to the Punzones Pass and the Cipreses valley, in order to examine the northern flanks of the El Brujo range. After making the first ascent of El Brujo via its rather easy west face, lack of time prevented further exploration and they had to content themselves with an ascent of Tinguiririca before returning home.

Two years later Bachmann and Echevarria, this time with Enrique Vidaur razaga, decided to visit the sources of the Rio Pangal, the least known sector of the Chilean Cordillera Central. Firstly they penetrated the Cajòn Flores and climbed a fine snow and ice peak, Nevado de Flores, which took nine hours from an intermediate camp. Then they moved eastwards up river for about twenty-five kilometres and entered the long, stony Paredones valley which leads to a vast cirque formed by the rocky group of Sierra de los Paredones - Serrucho, a beautiful solitary snow peak; Catedral del Barroso; the broad massive group of the Picos del Barroso; and Morro de la Mama, another 'Matterhorn'. After climbing the easy north-west peak of the Picos del Barroso in order to reconnoitre a route, they agreed to attempt the difficult Serrucho. The only route was via the south-east glacier leading to a snow col, where they bivouaced after climbing a steep gully. Starting early next morning they traversed the south face and climbed the steep ice slope leading to the summit snow-ridge, reaching the top mid-afternoon.

Subsequently, numerous peaks were climbed by various parties in these regions. In January 1957 a Chilean group made several rather difficult first ascents above the Mamà valley, including Alto de la Mamà, on which thirty pitons were used. Climbs were made in the Cipreses valley in 1959 by a party of Chilean university students, and again in 1960 as part of the programme of a joint Chilean-Japanese expedition. In 1962 Keith Whitelock and his wife made first ascents in the Flores group, and in 1964 the Club Andinismo Mañke climbed in the El Brujo and Cortaderal ranges.

Peak List

Pangal River Region

(a) Grupo Flores

Nevado de Flores 4910m: 1-1951 via S. ridge.

Torre de Flores 4885m: 1-1953: From S.E. via Glaciar de la Torre-1963.

Punta Ventisquero 4600m: located at head of Glaciar de la Torre: 1-1963 S.E. glacier.

Mirador de la Torre Flores 4850m: 1-1963. Puntilla Alta de Flores (Torre de Pangal):

--Main peak 4520m: difficult peak: 1-1963 via W. glacier, S. crest.

--South peak 4512m: 1-1962 via W. glacier and W. face to summit ridge, traverse to E. face to notch 15m below the two summits, very rotten rock.

Puntilla I de Flores 4330m: 1-1959.

Puntilla III de Flores (Wedge Peak) 4260m: the most imposing of the Puntillas, a savage wedge-shaped peak, harder than Puntilla IV: 1-1962 via S.E. face: From Glaciar Superior-1963.

Flor Blanca 4250m: an ice cone on the far rim of W. glacier of Nev. de Flores: 1-1962.

Nevados de Arhuelles massif:

--Torreòn Antu Pir,n 4830m: imposing rock tower: 1-1985.

--Alto del Pamir c.4500m: 1-1985.

Centinela (Centinela del Pamir?) 4200m or higher: rock peak at head of Caj¢n de Flores: 1-1962.

Puntilla II de Flores 4100m: 1-1958.

Puntilla IV de Flores 4080m: 1-1962 from S. glacier, pleasant ice climb ending on shattered rock of

S.E. ridge.

Mountaineering in the Andes

Central Chile

Cabeza del Glaciar 4300m: 1-1963 from Glaciar Superior.

Cerro San Joaquin 3912m: a rocky point with vertical walls except to N.E. 1-1960 via easy, narrow N.E. ridge.

Alto del Potrerillo 3905m: located in the cordòn which separates Estero de Flores from R_io Blanco: 1-1960 from Potrerillo Alto via eastern screes, easv.

Selected References

Echevarria, E. 'Some first ascents in the Chilean Andes'. AJ, 58 (1952): 407-9.

Figueroa, A. 'El Cajòn de Flores'. FAEC, (1961): 49-61.

(b) Mamà & Paredones Valleys

Alto de la Mamà 4754m: 1-1957, one of several rather difficult first ascents made by a Chilean party.

Punta Mistral (Co.Gabriela Mistral) 4500m: 1-1957, fairly difficult.

Corona de Don Manuel 4420m: 1-1957.

Picos del Barroso:

--Central peak 5000m?: 1-1948.

--Eastern peak 4980m?: 1-1942.

--North-west peak 4950m?: 1-1951.

Cerros de Federico 4000m: 1-1948.

. 1-1940.

El Serrucho ('The Handsaw') 4770m: 1-1951.

Balcòn del Paredones 4130m: 1-1966.

Catedral del Barroso 4510m: fine peak, bad rock, frozen conglomerate: 1-1978.

Selected References

Arias, F. 'Primera ascensión al Catedral del Barroso'. FAEC, (1977-83): 88-90.

'Ascensión al Cerro Alto de la Mamà'. FAEC, (1959): 105-113.

Echevarria, E. 'Some first ascents in the Chilean Andes'. AJ, 58 (1952): 407-9.

Rio Cachapoal Valleys

(a) Cipreses

Cerro Dr. Hernan Cruz 4630m: 1-1959.

Alto del Cotòn Norte 4250m: 1-1960 via screes N. of Cotòn, as far as W. side of peak, thence briefly via difficult gullies to top.

Cotòn 4550m: 1-1960.

El Innominado (Chile-Japòn) 4450m: 1-1960.

Cumbre Granitos 4400m: 1-1959. Alto del Cipresito 3900m: 1?-1969. Cerro Gendarme 4500m: 2-1981.

Selected References

'Expedición de la Asociación Universitaria a la zona de Cipreses'. FAEC, (1959): 113-25.

'Expedición chileno-japonesa Andes centrales 1960'. FAEC, (1960): 57-117.

Figueroa, A. 'Expedición del Club Andino de Rancagua al Cajón del Cachapoal'. FAEC, (1961): 137-151.

(b) Sierra de Cortaderal

Gran Torre del Cortaderal 4150m: south of Volcàn Palomo, dividing the two arms of Glaciar Cortaderal: 1-1964 via west Cortaderal glacier and W. couloir. †

Colmillo 4000m: north of Nev. Cortaderal, on same ridge: 1-1964 via S.crest. . †

Nevado Cortaderal 4040m: located immediately north of tongue of Glaciar de Sierra Negra: 1-1964 via S. glacier. . †

Mirador del Cortaderal 4000m: 1-1964 from Glaciar Universidad via western slopes.

Pilar Oriental 3990m: rocky finger east of junction of Cortaderal and Universidad glaciers: 1-1964 from Glaciar Cortaderal, via W. crest, traverse N. face, and N.W. gully. Descent via W.gully. . †

Aguja Roja 3950m: slender reddish needle: 1-1964 S. crest, descent via W. slope. . †

Aguja Verde 3900m: needle with rounded summit, greenish colour: 1-1964 via S. crest from Torrecilla. ;

Torrecilla 3800m: 1-1964 via N.W. gully and summit ridge. . †

(c) Cordòn de los Granitos (Cordòn Divisor)

Corona del Diablo 4580m: located west of Glaciar Universidad, very visible, characteristic form: 1-1964 on ice and final gully of E. face. . †

Nevado Ma¤ke 4480m: located N.W. of Nevero del Glaciar Universidad: 1-1964 via N. rock ridge from Nev. Penitentes. . †

Nevado Penitentes 4450m: located S.W. of Nevero del Glaciar Cortaderal: 1-1964 from Glaciar Cortaderal via N.W. couloir and summit ridge. . †

Nevado Cisne 4350m: 1-1964 via N. ridge from Cola del Cisne. . †

Cola del Cisne 4340m: 1-1964 via eastern glaciers of Nev. Cisne. . †

Pilar Occidental 3960m: 1/2-1964 via E. & W. ridges. . †

Aguja de Roca 3800m: its eastern foresummit resembles a Paine tower: 1-1964 via N. glacier and W. ridge. . †

(d) Sierra Negra

Nevado de Sierra Negra 4500m: 1-1964

Hermandad 4100m: 1-1964 via northern screes.

Làgrimas 4100m: rock needle on ice pedestal, located directly east of Glaciar de Sierra Negra: 1-1964 via W. glacier, finishing on S. face. . †

Budapest 4100m: similar in form to L grimas: 1-1964 via N. ridge, descent via S.W. ridge. . †

Mesoncito 3950m: located west of Budapest, with characteristic mesa form: 1-1964 via E. ridge, descent via N. couloir. . †

R;o Tinguiririca Valleys/Cordillera de Colchagua (a) Sierra de Brujo

Cerro Asae (A.S.A.E.) 4400m: 1-1959: 1st ascent via Portillo glacier-1962.

Alto de los Arrieros 5000m: 1-1950 via S. ridge, descent via Canal¢n Oriental to Glaciar Mañke. . †

Cerro Portillo 4980m: difficult peak: 1-1964 by traverse from Alto de los Arrieros. . †

El Quebradizo 4800m: rock peak in El Brujo group: 1-1978.

Los Dos Gemelos 4750m: rock peak in El Brujo group: 1-1978.

P.c.4700m: rock tower N.E. of El Brujo: 1-1982.

El Brujo ('The Wizard') 4720m: 1-1949 from N.W.: Central tower-1979.

Cerro Mirador de los Volcanes c.4400m: 1-1982.

Cerro Nuseva 4720m: 1-1971 via big glacier with penitentes.

. † - Club de Andinismo Mañke expedition to the fine rock and ice ranges due east of Rancagua and San Fernando. They made first ascents of some twenty peaks. Most of the peaks climbed were fine pyramids with steep faces of quite good rock, and small hanging glaciers.

Selected References

Bachmann, W. 'Tres ascensiones en la Cordillera de Colchagua'. RA, n.68 (1949): 7-8. El Brujo, El Palomo, Tinguiririca.

Echevarria, E. Ñ'Chilean Cordillera Central', AJ, 65 (1960): 53-61.

'Expedición de la Asociación Universitaria a la zona de Cipreses'. FAEC, (1959): 113-25.

Quiroz, R. 'Segunda ascensión a la Torre Central del Brujo'. FAEC, (1977-83): 64-6.

(b) Sierra del Az£fre

El Palomo 4850m: 1-1927. Punta Rosita 4040m: 1-1956.

Alto del Az£fre:

--South peak 4550m: 1-1980.

--North peak 4545m: 3-1963 via W. ridge, lacked equipment for reaching S. summit.

Cerro Violeta 4250m: 1-1980. Cristal del Az£fre 4150m: 1-1980.

Puntilla II del Az£fre 4390m: 1-1963 via western slopes from Glaciar del Azufre.

Puntilla I del Az£fre 4350m: 1-1963 via S. ridge from Puntilla II.

Puntilla V del Az£fre 4350m: 1-1963 from S. glacier.

Tinguiririca 4300m: 34ø49ÒS 70ø21ÒW: 1-1930, but attempted and possibly climbed much earlier.

Volcàn Fray Carlos 4050m: located c.3 km. south of Tinuiririca: 1-1962.

San Hilario 4030m: located between Caj ϕ ns San Andr,s and Az \pounds fre: 1-1953 from a very low camp near R_i o Az \pounds fre.

N.B. The Puntillas del Az£fre are five rocky points between Alto del Az£fre and Tinguiririca.

Selected References

Bachmann, W. ÑTres ascensiones en la Cordillera de ColchaguaÖ. RA, n.68 (1949): 7-8. El Brujo, El Palomo, Tinguiririca.

Echevarria, E. 'Chilean Cordillera Central', AJ, 65 (1960): 53-61.

(c) Sierra de los Punzones

Gemelos 4750m: 1-1963 via E. face.

Alto de los Guanacos 3600m: 1-1963 from Quebrada de San Andr,s.

Alto de los Cipreses 3600m: west of Alto de los Guanacos: 1-1963 via S.W. slope.

San Augusto 3670m: 1-1962.