standing for ESO's interest in alternative solutions was expressed. Oort informed Edmondson on the decision of the ESO Council by letter of June 12, 1964, with copy and accompanying letter to Mayall. From the last one I quote: *"– – – Personally I am disappointed that this decision will make our relations in Chile less intimate than they would have been if our observatories could have been erected on Morado, as had been provisionally planned during our beautiful common trip, last year. But, considering the circumstances as they have gradually developed, I believe that the course we have now decided on, may be the best. – – –".* Mayall, in his reply of June 20, expressed the same feelings. From Edmondson's reply of July 7, let me quote: *"– – – I see no reason why there should not be frequent contact between ESO and AURA astronomers, even though ESO locates outside of the AURA domain. I am sure that such contacts will develop in a very natural way. – – –"* [34].

As we know now, the conditions imposed by Council were satisfactorily met by Heckmann's subsequent negotiations, and so the decision of the Council meeting on May 26, 1964, did imply the final choice for ESO's site: La Silla.

With many suitable mountains in the Andes around La Serena, how had the working group arrived at narrowing down the choice to La Silla and Guatulame, besides Cinchado Sur on the AURA property? The basic idea, as described by Heckmann [35] was, to look first of all for government property, as this would facilitate the negotiations for purchasing, especially in view of the recently concluded Convenio. Rösch, according to Heckmann, managed to borrow from the Ministerio de Tierras y Colonisación a unique atlas, scale 1 : 200,000 of all government property. From it they selected the two new sites and they obtained further information on water sources and mining activity from maps of the Instituto de Investigaciones Geológicas. Closer inspection of the sites was done by means of a helicopter put at their disposal by the Chilean Air Force.

Reviewing these developments, the reader may be surprised by the absence of a thorough test of La Silla before it was adopted by ESO. André Muller reminds me of the conviction established at that time by Stock's tests: almost any mountain top in the La Serena area at the level 2000 to 3000 metres, well isolated from the surrounding peaks, should be adequate. The almost universal property of the near-absence of temperature drop during the night on these mountain tops virtually guarantees good seeing quality.

A comparison of seeing between La Silla and Morado was carried out in the context of CARSO's Site Survey in 1966/67 by John B. Irwin and reported in ESO Bulletin No. 3. Equality of seeing conditions on the two sites, confirming the above expectation, is implicit in Irwin's Table 1. Explicit is John's praise of ESO's *"meals that are the envy of the Morado observers".*

Acknowledgement

It is a pleasure to acknowledge many helpful comments I received from Dr. F.K. Edmondson, former President of the AURA Board.

References and Notes

Note: for a list of the ESO Committee meetings see the Table in article I.

Abbreviations used:

EC = ESO Committee, the committee that preceded the Council.

EHA = ESO Historical Archives (see the article in the *Messenger* of December 1989).

FHA = Files Head of Administration at ESO Headquarters.

Heckmann Sterne = O. Heckmann, *Sterne, Kosmos, Weltmodelle,* Verlag Piper & Co., München–Zürich, 1976.

[1] See, for instance, Kuiper's report in *Lunar and Planetary Laboratory Communication* No. 156 of October 1970 in EHA-I.C.2.7.b.

[2] A copy of these reports is kept in EHA-I.C.5.

[3] See accounts by Stock in *Chile Site Survey Technical Report* No. 2, Kitt Peak Nat. Obs., 1963 in EHA-I.C.2.7.b., and in *Information Bulletin Southern Hemisphere,* No. 7 Oct. 1965, Ed. J. Sahade.

[4] I am indebted to Dr. F.K. Edmondson for informing me about these developments.

[5] See Addendum C to the Minutes of the 2nd EC meeting of January 1954.

[6] See page 5 of Stock's Report mentioned in Note [3].

[7] These three letters in EHA-I.C.1.1.c.

[8] These two letters in EHA-I.C.1.5.b.

[9] In EHA-I.C.1.5.c.

[10] The detailed report is in EHA-I.A.2.7.

[11] In EHA-I.A.2.7., see also reports in EHA-I.C.1.5.f.

[12] These two letters in EHA-I.A.2.8.

[13] See EHA-I.A.2.8. for letters OH to FKE of August 26 and FKE to OH of September 3, 1963.

[14] See minutes of the discussion in EHA-I.A.2.8.

[15] See, for instance, G.W. Preston's account "That Special Mountain", Carnegie Inst. of Washington, May 1986.

[16] EHA-I.A.2.8.

[17] Communicated by F.K.E. to the author.

[18] In EHA-I.A.2.8.

[19] The full title reads: Convenio entre el Gobierno de Chile y la Organización Europea para la Investigación Astronómica del Hemisferio Austral, para el Establecimiento de un Observatorio Astronómico en Chile. See the volume *ESO Basic Texts.*

[20] For reports on these meetings see EHA-I.C.2.7.a.

[21] H. Siedentopf, Comparison between South Africa and Chile. *ESO Bulletin* No. 1, p. 11, 1966.

[22] Heckmann Sterne, p. 288.

[23] In EHA-I.A.2.8.

[24] See notes by Oort and the telephone bill in EHA-I.A.2.8.

[25] In EHA-I.A.2.8. and I.C.1.5.e.

[26] EHA-I.A.2.8.

[27] Communication by F.K. Edmondson to the author.

[28] See EHA-I.A.1.22.

[29] See EHA-I.A.2.8. as well as the minutes of the meeting prepared by AURA, in EHA-C.1.5.e.

[30] See the letter of February 2, 1964 of Edmondson to Heckmann in EHA-I.A.2.8.

[31] See, for instance, the minutes of the informal EC meeting on 20 January 1964, Council Doc no. 20 in FHA.

[32] EHA-I.A.2.8.

[33] EHA-I.A.2.10.

[34] All four letters in EHA-I.A.2.8.

[35] Heckmann Sterne, p. 290ff.

New ESO Scientific Preprints

March–May 1989

636. L.K. Kristensen and R.M. West: On the Lost Minor Planet (719) Albert. *Astronomy and Astrophysics.*

637. P.A. Shaver and M. Pierre: Large-scale Anisotropy in the Sky Distribution of Extragalactic Radio Sources. *Astronomy and Astrophysics.*

638. R. Buonanno and G. Iannicola: Stellar Photometry with Big Pixels. *Publications of the Astronomical Society of the Pacific.*

639. E. Brocato et al.: Synthetic Colours and the Chemical Evolution of Elliptical Galaxies. *Astrophysical Journal.*

640. M.-H. Ulrich: The Host Galaxy of BL Lac Objects or What's in a Name? To be published in the proceedings of the workshop: "BL Lac Objects, 10 Years Later", Como, Sept. 1988.

641. L. Binette et al.: Relation between the Ionizing Continuum and the Emission lines in Fairall 9. *Astrophysical Journal.*

642. M. Marcelin et al.: Kinematics of the Jet of the Crab Nebula. *Astronomy and Astrophysics.*

643. J. Barbero et al.: The Age Calibration of Integrated UV Colours and Young Stellar Clusters in the Large Magellanic

Cloud. *Astrophysical Journal.*
644. L.F. Rodríguez and H. Reipurth: Detection of Radio Continuum Emission from the Herbig-Haro Objects 80 and 81 and their Suspected Energy Source. *Revista Mexicana de Astronomía y Astrofísica.*
645. C. Aspin et al.: CCD Observations of Bipolar Nebulae. IV: S. 106. *Astronomy and Astrophysics.*
646. F.R. Ferraro et al.: A Method to Study the Star Formation History of Dwarf Irregular Galaxies: 1: CCD Photometry of WLM. *Monthly Notices of the Royal Astronomical Society.*
647. M. Roth et al.: Near-Infrared Images of Young Objects in the HH 1–2 and HH 3 Regions.
648. C.N. Tadhunter, R.A.E. Fosbury and P.J. Quinn: The Kinematics of the Ionized Gas Around Powerful Radio Galaxies. *Monthly Notices of the Royal Astronomical Society.*
649. A. Soubeyran et al.: 3C 120. Study of Continuum-Emitting Condensations Close to the Nucleus. *Astronomy and Astrophysics.*
650. M.-H. Ulrich: Intermediate Resolution Spectra of Quasars with $Z > 2$. *Astronomy and Astrophysics.*
651. A. Cavaliere, E. Giallongo and F. Vagnetti: Evolutionary BL Lacs? To appear in the proceedings of the workshop "BL Lac Objects! 10 Years After", Como, Sept. 1988.
652. M. Heydri-Malayeri, P. Magain and M. Remy: Two More Very Massive Stars Resolved. *Astronomy and Astrophysics.*
653. H.E. Schwarz, C. Aspin and J.H. Lutz: He2–104: A Symbiotic Proto-Planetary Nebula? *Astrophysical Journal.*

Astronomy at 6000 m!?

S. BRUNIER, "Ciel et Espace", Paris, France

High-altitude Observatories

The astronomer and the mountain have always been good friends, the first knowing well that the higher he mounts on the second, the clearer and the more transparent is the sky he can study . . .

During the past century, high altitude observatories have sprung up in various places of the globe. They are real eagles' nests, the objects of cult and dreams of amateur astronomers: Pic du Midi (2870 m above sea level), Gornergrat (3100 m), Jungfraujoch (3580 m) and recently the famous Mauna Kea which now has the world record at 4210 m elevation.

As a science journalist and amateur astronomer, I was impressed during my visit to La Silla last year by the efforts which ESO currently invests in the VLT site selection. At that time I learned that at La Silla (2400 m) and Cerro Paranal (2660 m), and also at even higher places, very advanced meteorological research has been going on in the hope of finding a site with ideal sky conditions.

At that time a crazy idea germinated in my amateur astronomer's mind, envious of the large telescope observatories: why not try to install under the Andean sky a temporary astronomical observing station at extremely high altitude, indeed the "highest observatory in the world"?

This idea became reality this February, thanks to the studies undertaken by ESO in the Atacama desert and the experience by La Silla Andinist specialists Christian Gouiffes and Bertrand Kohler. Together with seven amateur astronomer friends and four French and Chilean high mountain guides, I was able to transport an equatorially mounted telescope through the Atacama desert to the slopes of the Ojos del Salado volcano, whose peak is the highest point in Chile at almost 7000 m altitude.

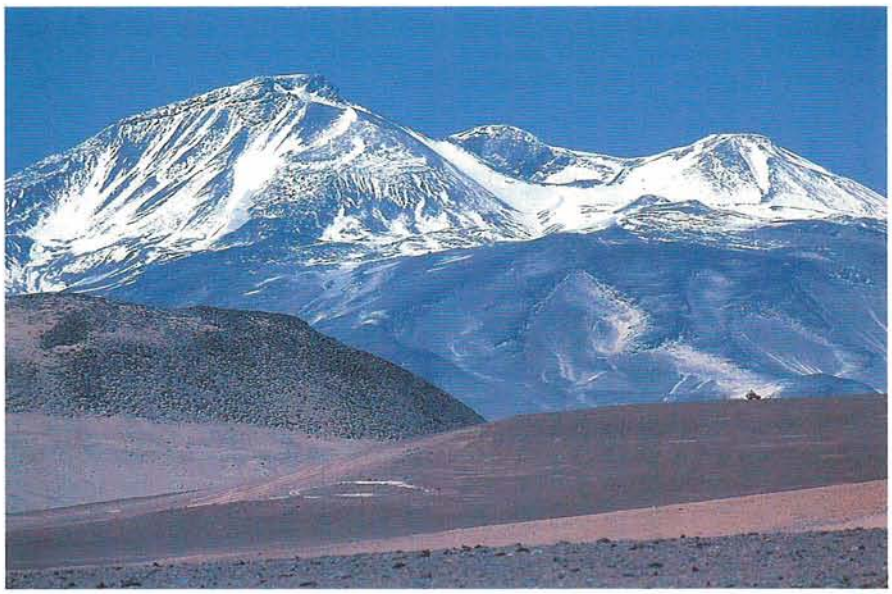

Figure 1: *Nevado Ojos del Salado in the Atacama is the tallest volcano in the world and the second highest peak in the Americas.*

Figure 2: *"The highest observatory in the world". At the second camp, 5200 metres above sea level, all members of the team gather proudly behind the telescope.*