Organisation Européenne pour des Recherches Astronomiques
dans l'Hémisphère Austral

EUROPEAN SOUTHERN OBSERVATORY

ANNUAL REPORT 1965

Hamburg-Bergedorf
1966

This Report was approved by the ESO Council
in June 1966

CONTENTS

A. INTRODUCTION

The following report is an attempt to describe the various branches of ESO's activity during 1965 systematically, in spite of much unavoidable overlapping. It is assumed that the reader is acquainted with the whole project in general. He should refer to the Annual Report 1964 for basic and additional information. In the present report a larger number of figures and photographs than in the previous one have been added in order to make it more informative.

During the year 1965 the legal foundations of ESO in Chile had to be strengthened and extended. The year was filled with preparatory work for the constructions in Santiago and at La Silla. Construction and design of instruments advanced.

On 2 June 1965 B. Lindblad was elected President of the ESO Council. He succeeded J. Oort who had been the Chairman of the provisional ESO Committee since 1953 and President of the Council since early 1964. With the sudden and quite unexpected death of B. Lindblad on 25 June 1965, caused by a serious illness of which nobody had been aware, ESO lost one of its founders who had given the project permanent encouragement and successful support. J. Oort provisionally resumed the presidency until the election of G. Funke on 1 December 1965.

B. LEGAL MATTERS

1. Land and Houses

On 2 January 1965 the Convention between the Chilean Government and ESO about the donation of land in Vitacura for the Headquarters Building was ratified. (See Annual Report 1964 No. B. 4.) The text of the Convention was published in the Diario Oficial on 4 February 1965, thus becoming Chilean law.

In Santiago the Organization acquired a fairly large private house at a favourable price, for use as a guest-house in the near future. Whether this property will be kept permanently and no hostel erected near the Headquarters in the Parque de Vitacura, depends on future experience.

In La Serena ESO acquired a house with its surrounding plot for one of its employees, the terrain providing sufficient space for additional constructions.

2. Building Permits

In a letter of 24 August 1965, the Municipalidad de Las Condes agreed to the general layout which the ESO Architects, Messrs. de Vlaming and Salm, Amsterdam, had prepared for the Headquarters Building in Vitacura. Their main subject was the harmony of the building and its surroundings with the municipal plans for the development of the adjacent areas which in the future are to become a large public park along the river Mapocho.

The Comunidad de la Higuera in the north of the Provincia de Coquimbo gave its consent, and the Ministerio de Obras Públicas subsequently gave its approval to the construction of the Observatory Buildings on La Silla.

3. Taxes

On 26 October 1965 the President of the Republic of Chile signed a decree granting to ESO the exemption from turnover-tax and some indirect taxes. In Chile the United Nations benefit from similar exemptions.

4. Mining Rights

The mining rights which ESO had already claimed at an early stage were investigated further. The legally required measurement of a large area was carried out. In two cases conflicts with other claims were successfully cleared by the Courts.

Nevertheless it was thought necessary to take additional precautions by a minor supplement to art. 17 of the Chilean Mining Law which protects military grounds, air ports, and national parks.

As a change of the law, however, would need a long parliamentary preparation, it was agreed with the Ministerio de Relaciones Exteriores and the Ministerio de Minas that, as a first step, the signing of a supplementary convention, protecting ESO's property without violating already existing mining rights, was preferable. At the end of the year 1965 this procedure was not yet completed.

5. Water Rights

Water rights in the Quebrada Pelícano were applied for.

C. ACTIVITIES AT PELÍCANO AND LA SILLA

1. Road Construction and Site Preparation

a) Provisional Road

The present tracing of the road from Pelícano to La Silla was first suggested by Mr. Muller and, after a few improvements, marked later by Mr. Voigt in January. Again parts of the trace were slightly altered in discussion with Ing. Schmickaly of the firm of Hochtief. A contract with the firm of Schwarze was signed on 16 March, and by the end of March the road construction had started. The provisional road was practically finished by the middle of June.

b) Final Road

It was advised by Hochtief, Santiago, that Schwarze should carry on with the construction of the final road under a cost plus fee contract. ESO Hamburg agreed and the existing contract with Schwarze of 16 March was

extended on 16 June to include the construction of the final road.
During the road construction period Schwarze once more got his original contract extended with the aim of levelling the various instrument sites and constructing access roads to these sites.

On 31 December 1965 the situation was as follows:

1. Final road practically completed, to be finished by 31 January 1966.
2. All telescope sites levelled.
3. All access roads to and parking places near the telescope sites completed.
4. Areas for the La Silla camp finished as well as its small access roads.

2. Water Supply

On 29 April a contract was signed between ESO and the Company "Celedón y Zañartu" (Celzac) for the drilling of a number of boreholes for the water supply of the Observatory on La Silla and Camp Pelícano. Altogether 5 borèholes were drilled with the following results:

Borehole No. 1 — output approx. 75 m^3/day
Borehole No. 2 — output approx. 35 m^3/day
Borehole No. 3 — output approx. 57 m^3/day
Borehole No. 4 — output approx. 23 m^3/day
Borehole No. 5 — output approx. 20 m^3/day

It is not yet known exactly what the yield will be under continual use. This will be carefully studied in 1966.

3. Power Supply

The 4 kVA generator, which had already been used in South Africa, was installed in Camp Pelícano and put into operation on 30 March. In August the 1¾ kVA Lister generator, previously used in South Africa, was installed in the temporary camp on La Silla. Until then a small portable generator of 1 kVA had been used.

In the first week of November the generators of 9, 14, and 42 kVA from Siemens, Germany, arrived at Pelícano. The 42 kVA and 9 kVA generators are intended for La Silla. The 42 kVA will be for general use, whereas the 9 kVA will provide power for the photometric 40" telescope in its provisional installation and for a small measuring equipment. The power house at Pelícano, where the 4 kVA was housed, was enlarged and the 14 kVA was added to the 4 kVA generator.

4. Camp Pelícano

In March Messrs. Muller and Voigt decided on the final site for the camp at Pelícano. The outlay of this camp as proposed by Voigt was accepted and, with slight alterations, partly realized in 1965.

Construction started in April 1965 with living quarters for 10 labourers. Prefabricated houses were erected for Hochtief. The blockhouse of Marchetti was started in the second week of May. In June the construction of the "cocina-comedor" was begun (a special house with a kitchen and two dining rooms), and in July the electrical and mechanical workshops were started.

Part of the Camp Pelícano was constructed by ESO labour, part came again under a contract with Schwarze. At the end of 1965 the position was as follows: Blockhouse for the ESO staff with office for the technical department completed; "cocina-comedor" nearly finished; electrical and mechanical workshop with bodega completed; three living quarters for the ESO camp-staff practically finished; four living quarters for labourers in use; ESO bodega under construction; gate with watchman's house completed; waterpump installed at first and third borehole; 14 kVA generator in use.

5. Outlay at La Silla

The meteorological activity started on 23 January. After March the weather conditions at La Silla became so difficult that a small temporary camp had to be constructed. It consists of a small "cocina-comedor" with bodega, four living quarters for observers and labourers, and a wooden power house for the $1^3/_4$ kVA Lister generator.

Another site was prepared for the ESO stores, but later it was decided to build this store at Pelícano and to use the site for the permanent workshop. In August the whole site of the camp on La Silla was finished. The camp construction came under an additional contract with Schwarze. By the end of 1965, however, the constructions had not yet been started.

The erection of the temporary workshop was started in November and was practically finished by the end of December. The delay in the erection of this temporary workshop was due to a long delay in the delivery of the prefabricated steel shelter.

In November all telescope sites were finished. The final site for the astrograph is to be used temporarily for the 40" photometric telescope. Its building consists of a prefabricated construction ordered from Astro-Dome, Canton-Ohio, which is put on a concrete base foundation 3.7 m high. It is expected to be ready by May 1966.

6. Communication System

a) Equipment purchased by ESO

In order to have a radio connection between the Telescope Site on La Silla and the Pelícano Camp and also the possibility of communicating with people working within the ESO domain, a very high frequency radio-transmitter was ordered from the firm of Siemens.

The Chilean authorithies granted ESO permission to broadcast at the frequency of 166.95 mc.

The equipment arrived in Chile in the first week of July and was delivered through the Siemens department of Gildemeister in Santiago. It consists of two so-called car radio transmitters and one portable transmitter. One of the car radio transmitters was installed on La Silla and the other one in the Pelícano Camp. The installation was finished in the second week of September and proved to work perfectly.

Later on, an attempt was made to use the same equipment also for direct communication between La Silla and the La Serena Office. The equipment, however, proved to be too weak for that purpose, but it was found possible to use it for a direct connection between La Silla and Coquimbo.

For further trials aiming at improving the direct communications, more powerful aerials have been ordered. It is also considered to install a relay station between La Silla and La Serena.

b) Negotiations with "ENTEL"

Because of the mountain road constructed by ESO the Empresa Nacional de Telecomunicaciones, ENTEL, is interested in La Silla as a mountain where they can possibly build a relay station for their communication system throughout Chile. At the end of 1965, negotiations were well on their way. The preliminary outcome is that ENTEL is permitted to carry out its experiments on La Silla. If the plan develops favourably, if in particular no disturbances occur in photoelectric equipment of high sensitivity, ESO will be provided with direct connections from La Silla to La Serena and Santiago. It is, however, expected that several years will pass before these connections are established.

7. Meteorology

Mr. Muller has prepared a report on the meteorological observations on La Silla during 1965. It will appear in a forthcoming number of an ESO Bulletin. The observations concern cloudiness, wind velocity, temperature, and humidity. They could not be very regular because of the prevailing hard living circumstances during the year. In comparison with the results of 1962—1964, as collected on Tololo, the data for 1965 show the exceptional winter conditions of the year. But it is worth knowing that of the 219 nights during which observations were made, 76 were totally clear, 93 nights completely cloudy, and 50 partly cloudy. Of these latter 50 nights 30 were "photometric" in the sense that more than 6 consecutive hours were clear.

D. INSTRUMENTS

a) The Prism Astrolabe

The collaboration between the Chilean Observatorio Astronómico Nacional and ESO, prepared in 1964, was legalized by an agreement between the Universidad de Chile and ESO, signed in Santiago on 29 April 1965.

The astrolabe was installed in November and December 1965 by Mr. Guinot of the Observatoire de Paris together with the Chilean astronomer Mr. Nöel who will be the main observer. The first observations have already revealed numerous fairly large errors in the positions of the fundamental catalogue FK 4. During the first period of observation a chronograph was kindly provided by the Observatorio Nacional. The chronograph ordered by ESO from the firm of Ebauches, Neuchâtel, Switzerland, will be delivered in 1966.

b) The Objective Prism Astrograph

Further plate material for the determination of radial velocities of stars in and around the Magellanic clouds was secured at the Zeekoegat Station during the whole year. It is planned to finish the astronomical observations at the Station by the middle of January 1966. (Comp. Communication of the European Southern Observatory No. 5, M. Albert Florsch et Mme. Nicole Garozzi, "Etoiles à grande vitesse entre les Nuages de Magellan".) At the end of the year preparations to dismount the telescope had begun. Early in 1966 the mechanical parts of the instrument will be sent to Chile; the optical parts will be taken to France for overhauling before they are forwarded to Chile.

In 1965 the French CNRS (Centre National de la Recherche Scientifique) expressed its interest in purchasing from ESO the station apart from the telescope. In the future the station will problably be used for night sky observations.

c) The Photometric Telescope

After the telescope had been completed late in 1964, it was packed and sent to Chile in June 1965. It had to be stored there for the rest of the year because the construction of the building on La Silla in which the telescope will be provisionally mounted had been delayed by various circumstances. The prefabricated 8 m dome for this building, ordered from the firm of Astro-Dome in Canton, U.S.A., was delivered as early as May 1965. The work of the ESO Committee for the Photometer of the Photometric Telescope resulted in the construction of a very universal instrument which allows for a large variety of investigations. The instrument is fully digitized.

d) The Spectrographic Telescope

During 1965 considerable progress has been made on the Spectrographic 1.5 m Telescope, ordered from the firm of REOSC in Paris. At the end of the year, the mechanical parts of the telescope were almost ready. The blank for the main mirror was delivered by SOVIREL, Dépt. Parra-Mantois, in June, the figuring of the mirror is going on and is planned to be finished by the middle of 1966.

The large coudé spectrograph for the Spectrographic Telescope was ordered from the firm of REOSC in October 1965.

It will be equipped with interchangeable gratings of the size 200 mm × 300 mm and with 1200 lines/mm. The focal length of the collimator will be 6 m. For different dispersions the spectrograph will have 3 cameras with the aperture ratios F/1.9, F/3.3, and F/12.5 and focal lengths of 41, 67 and 250 cm respectively.

e) The Schmidt Telescope

The design of the Schmidt Telescope by Mr. Strewinski has continued during 1965. The telescope will have a very strong and rigid fork mounting, the upper bearing of the polar axis having the shape of a spherical zone, similar to that of the Schmidt Telescope of the Hamburg Observatory.

The blank for the main mirror of the telescope was delivered by Schott, Mainz, and will be transported to Zeiss, Oberkochen, in January 1966. The figuring of the main mirror will be started immediately after Zeiss, Oberkochen, has received the blank.

The blank for the Schmidt correcting plate will be delivered by Schott, Mainz, at the beginning of 1966.

It was decided to give the instrument a first objective prism with a dispersion of approx. 500—600 A/mm at Hγ. Negotiations with Schott, Mainz, about the delivery of a blank for this objective prism and with various optical firms about its figuring were going on at the end of the year.

f) The 3.5 m Telescope

During the year the design of the 3.5 m telescope has been thoroughly discussed by the Instrumentation Committee, Mr. Strewinski, the Director, and the Assistant Director. The mounting accepted is a proposal by Mr. Strewinski: a combined horse shoe and fork mounting with the surface of support of the upper polar bearing in the shape of a spherical zone; the declination axis is placed in the two very strong and rigid prongs of a short fork placed on the yoke of the horse shoe. Drawings are published in the Minutes of the I.A.U. Symposium No. 27: The Construction of Large Telescopes. Fig. 60—63. Kitt Peak National Observatory 1965.

The arrangement of the coudé focus will be a 3 mirror system with a rotating (swinging) third mirror. There will be two different horizontal coudé foci, one at the east, the other at the west side of the pier of the telescope; one of the coudé laboratories will be reserved for a conventional coudé spectrograph, the other for various auxiliaries of more experimental character. The building for the 3.5 m telescope will probably be circular with an interior diameter of about 28 m.

A definite order for the delivery of the silica glass disc was given to Corning Glass Works, U.S.A., on 25 January 1965. The order of a 150" silica disc by the Canadian Government with Corning in 1965 led to an appreciable price reduction for both the European and the Canadian disc.
The plan of a common ESO and CNRS Optical Institute has met with difficulties. As a consequence the ESO Council at its Meeting on 30 November and 1 December 1965 recommended negotiations with optical firms about the figuring of the optics for the 3.5 m telescope. Preliminary discussions with such firms were going on at the end of the year.

g) Auxiliaries for Evaluations and Measurements

The equipment of the Headquarters in Santiago and the Telescope Site on La Silla with auxiliary instruments for evaluating and measuring plates is under discussion by the Instrumentation Committee and the astronomers of the Management.

E. DOMES

Many European firms were asked to tender for the domes of 9, 12, and 13 m diameter respectively. Finally the firm of Seibert Sécometal, Saarbrücken — Paris, was engaged with the design, the construction, and the assembling of the domes. Their proposal dispenses with steel ribs and compares favourably in price with all other offers. The delivery time is about 12 months.

F. BUILDING PROGRAM

The ESO Building Program accepted on 15 November 1963 by the Provisional Council was — after three Meetings of the ESO Working Group for Buildings on 10 March, 7 May and 30 August 1965 — re-discussed by the Council during its 4th Meeting in Stockholm on 1 and 2 June 1965. Some minor changes of the original program were approved and it was finally decided to construct the following buildings:

1. On La Silla:

a) The buildings, including laboratories and darkrooms, for the objective prism astrograph, the photometric telescope, the spectrographic telescope, the Schmidt telescope, and the 3.5 m telescope.

The last building, however, will be constructed a few years later, when the plans for the instrument and its spectrographs are sufficiently complete.

b) A hostel consisting of one wing with 14 sleeping units and one with kitchen, dining room, living room, library, and reading room.

In addition a dormitory for daysleepers, a small office building, and a workshop are provided for.

2. In Santiago:

A headquarters building with the main administration, office rooms for the astronomical staff, lecture room, library, reading room, electronic laboratory, plate archive, and some rooms for auxiliary equipment needed for the evaluation of the observations made on La Silla.

In addition a workshop and a little janitor's house are to be constructed.

For a later period, an enlargement of the whole building complex is envisaged.

This program was covered by the work of the architects Messrs. de Vlaming and Salm, Amsterdam. They finished the design of the instrument buildings about the middle of the year; only the building of the objective prism astrograph was designed by Mr. Voigt, the ESO Assistant Director for Construction. The work of the architects on the other buildings was continued until late in 1965. A few details will remain to be discussed even in 1966.

The design of the architects Messrs. de Vlaming and Salm was given to Sentab, Stockholm, who together with Hochtief, Essen, form our Consortium of Consulting Engineers. They are working out all technical details and tender documents which, in 1966, will be given to the Chilean contractors for competitive offers. Late in 1965 their work on the instrument buildings was completed, whereas the technical details of the hostel and the headquarters building will continue in 1966.

G. ORGANIZATION

1. The Office of the Director

The Office of the Director in Hamburg-Bergedorf has been enlarged slightly by adding one assistant, Miss Schmidt, to the accountant. As from 1 August 1965 Dr. R. Plentl, the future administrator of the Organization in Chile, has been appointed. He worked in the Office of the Director until 31 December 1965. The administrator will assume his post in Chile in January 1966.

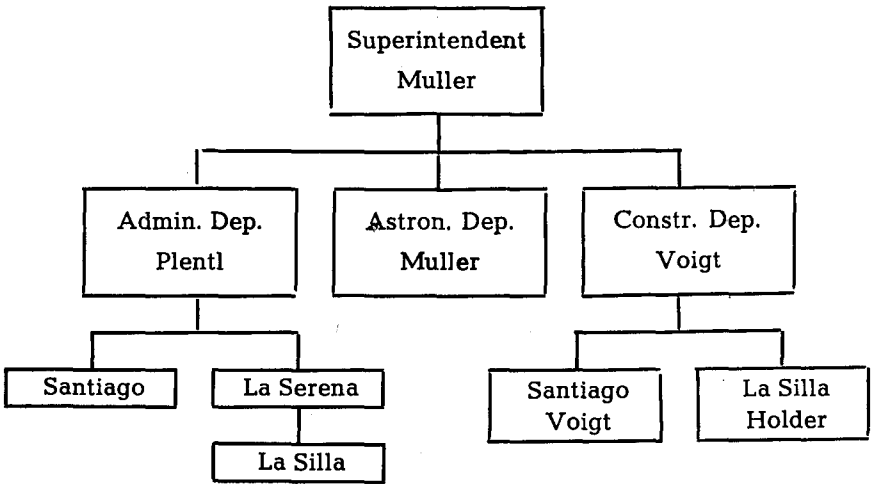
2. The Office of the Superintendent in Chile

In January 1965 an administrative employee for the Office in La Serena, Mr. Straatman, was sent out from Europe, together with an assistant camp boss for the Camp Pelícano, Mr. Bosker. With a view to the growing responsibilities for the arriving materials and instruments, the assistant camp boss, Mr. Bosker, was promoted to storekeeper as from 1 November 1965.

Furthermore, an engineer, Mr. Holder, was sent out from Europe to Chile as engineer for ESO's technical department. A precision mechanic, Mr. Doornenbal, came to Chile for the installation of a provisional workshop on La Silla.

In Santiago an office was established in the Guest House under the supervision of an administrative employee, Mr. Briggs, with an assistant, Mr. Vásquez, both of Chilean nationality. As from 1 November 1965 the assistant director for construction, Mr. Voigt, will live in Chile in order to take charge of the overall construction activities.

The various activities in Chile will be organized for the time being as follows:



3. Marseille

In Marseille a small office is maintained by the Chairman of the Instrumentation Committee with the assistance of one secretary, Mrs. Vincent.

4. Zeekoegat

At the Zeekoegat Station Mr. and Mrs. Petit as well as Mr. Kaufmann have been charged with the astronomical activities.

The names of the staff in Europe, Chile, Marseille, and Zeekoegat are given in Appendix 3.

H. ESTIMATED AND ACTUAL EXPENDITURE

Again, as in 1964, the progress of the building program of the Organization was slower than foreseen. Consequently, expenditure in 1965 was considerably less than estimated in the budget 1965 published in the Annual Report 1964.

In order to follow the retarded development of the plans, a revised budget for the year 1965 was drawn up, as shown below.

The total estimated budget of the Organization up to 31 December 1970 had also to be revised. The revised budget 1965 against the actual expenditure during that year can be detailed as follows:

Budget Items Amounts in 1000 US $	Total Budget up to 31. 12. 1970	Revised Budget 1965	Expenditure 1965
I. Capital Expenditure			
A. Land, Buildings, Roads	5 580	893	1 023
B. Instruments	6 821	558	558
C. Consultants and Architects	1 325	380	368
II. General and Overhead Expenses	3 166	434	457
III. Astronomical and Meteorological Activity South Africa	501	—	—
Unforeseen	222	37	14
TOTAL BUDGET CONSTRUCTION	17 615	2 302	2 420
IV. Astronomical and Meteorological Activity Chile	1 225	44	30
V. Maintenance Roads, Buildings and Instruments	450	—	—
TOTAL BUDGET INCLUDING EXPLOITATION	19 290	2 346	2 450

Income:			
Contributions Member States	18 040	2 000	2 000
Contribution Ford Foundation	1 000	—	—
Interests and Sundry Income	250	75	112
Transfer from Unspent Balance	—	271	338
	19 290	2 346	2 450

The total expenditure up to 31 December 1965 can be summarized as follows:

Budget Items Amounts in 1000 US $	Total Expenditure up to 31. 12. 1965
I. Capital Expenditure	
A. Land, Buildings, Roads	1 055
B. Instruments	793
C. Consultants and Architects	448
II. General and Overhead Expenses	723
III. Astronomical and Meteorological Activity South Africa	501
Unforeseen	30
TOTAL EXPENDITURE EXPLOITATION AND CONSTRUCTION	3 550
IV. Astronomical and Meteorological Activity Chile	30
	3 580

The total budget for the year 1966 has been fixed at US $ 3 910 000 detailed as follows:

Budget Items Amounts in 1000 US $	Total Budget up to 31. 12. 1970	Budget 1966
I. Capital Expenditure		
A. Land, Buildings, Roads	5 580	1 746
B. Instruments	6 821	1 282
C. Consultants and Architects	1 325	172
II. General and Overhead Expenses	3 166	598
III. Astronomical and Meteorological Activity South Africa	501	—
Unforeseen	222	42
TOTAL BUDGET CONSTRUCTION	17 615	3 840

Amounts brought forward	17 615	3 840
IV. Astronomical and Meteorological Activity Chile	1 225	135
V. Maintenance Buildings and Instruments	450	—
	19 290	3 975
Less: Sundry Income	—	65
TOTAL BUDGET INCLUDING EXPLOITATION	19 290	3 910

It must be noted that at the moment of writing this report the figures estimated for item I.A, Land, Buildings, and Roads, are still very uncertain, as the final estimates for the construction expenses are still unknown. The figures shown in the above estimates are based on the Architect's preliminary estimates.

The Auditors of the Organization, the Bundesrechnungshof, Frankfurt, have terminated their audit for the year 1964.

A condensed statement of accounts of the Organization as per 31 December 1964 is shown below:

Accounts Amounts in 1000 US $	Debit	Credit
Capital (Unspent Balance as per 31. 12. 63)		529
Deferred Charges	39	
Accrued Liabilities		59
Cash and Banks	2 351	
Sundry Debtors and Creditors	8	22
Contributions Member States:		
France	60	
The Netherlands	16	
Instruments to be received:		
France		60
Unspent Balance 1964		1 804
	2 474	2 474

Hamburg-Bergedorf, June 1966

O. Heckmann

I. APPENDICES

1. Members of the ESO Council during 1965

Belgium:	A. G. Velghe M. Deloz
France:	Ch. Fehrenbach R. Poussard
The Federal Republic of Germany:	H. H. Voigt K. F. Scheidemann
The Netherlands:	J. H. Oort (President until 2 June and Acting President after 25 June until 1 December 1965) J. H. Bannier
Sweden:	B. Lindblad (President as from 2 June until his death on 25 June 1965) G. Funke (President as from 1 December 1965) C. Schalén (as from 22 September 1965)

Meetings:
1 and 2 June 1965 in Stockholm.
30 November and 1 December 1965 in Hamburg.

2. Members of the ESO Committees and Working Groups as at 31 December 1965

ESO Finance Committee

Belgium:	M. Deloz
France:	J. Bourreau
The Federal Republic of Germany:	W. Boulanger
The Netherlands:	J. H. Bannier (Chairman)
Sweden:	G. Funke

Meetings:
1 and 2 June 1965 in Stockholm
11 November and 1 December in Hamburg.

ESO Instrumentation Committee

Belgium:	R. Coutrez
France:	A. Couder G. Courtès Ch. Fehrenbach (Chairman)
The Federal Republic of Germany:	A. Behr
The Netherlands:	Th. Walraven
Sweden:	A. Wallenquist

Meetings:

18 and 19 January 1965 in Hamburg.
18 and 19 May 1965 in Hamburg.
2 December 1965 in Hamburg.

ESO Sub-Committee for Spectrographs

Belgium:	M. V. Migeotte
France:	R. Bouigue
	M. Bretz
	Ch. Fehrenbach (Chairman)
The Federal Republic of Germany:	H. H. Voigt
	P. Wellmann
The Netherlands:	A. B. Underhill
Sweden:	B. Edlén (Consultant)
	Y. Öhman (Consultant)
U.S.A.:	I. S. Bowen (Consultant)

Meetings:

18 January 1965 in Hamburg.

ESO Committee for the Photometer of the Photometric Telescope

The Federal Republic of Germany:	A. Behr
The Netherlands:	J. Borgman

ESO Working Group for Buildings

Belgium:	J. Dommanget
France:	P. Lacroute
The Federal Republic of Germany:	O. Heckmann (Chairman)
The Netherlands:	A. Blaauw
Sweden:	E. B. Holmberg
Denmark:	A. Reiz

Meetings:

10 March 1965 in Hamburg.
7 May 1965 in Hamburg.
30 August 1965 in Hamburg.

ESO Working Group for Preparing a Scientific Programs Committee

France:	R. Cayrel
The Federal Republic of Germany:	O. Heckmann (Chairman)
The Netherlands:	A. Blaauw

ESO Working Group for Colloquia

Belgium:	L. Neven L. Houziaux (Substitute)
France:	R. Cayrel
The Federal Republic of Germany:	U. Haug T. Herczeg (Substitute) O. Heckmann (Chairman)
The Netherlands:	A. B. Underhill
Sweden:	T. Elvius G. Larsson-Leander (Substitute)

ESO Committee for the Study of the Results of the Site Tests

Belgium:	J. Dommanget
France:	Ch. Fehrenbach J. Rösch (Chairman)
The Federal Republic of Germany:	H. Scheffler
The Netherlands:	A. Blaauw
Sweden:	E. B. Holmberg

ESO Working Group for Publication Problems

Belgium:	A. G. Velghe
France:	P. Lacroute
The Federal Republic of Germany:	O. Heckmann (Chairman) H. H. Voigt
Sweden:	G. Funke

3. Employees on Contract with ESO as at 31 December 1965

Hamburg Office:

O. H. L. Heckmann	Director
J. M. Ramberg	Assistant Director
H. O. Voigt	Assistant Director for Construction
J. Bloemkolk	Manager
R. Plentl	Administrator (Chile)
H. W. Marck	Accountant
H. Schmidt	Assistant Accountant
B. Wächter	Librarian
E. Görner	Secretary
G. A. M. Jacobse	Secretary

Chile:

A. B. Muller	Superintendent
R. H. G. Holder	Resident Engineer
H. E. Schuster	Assistant Astronomer
H. J. Straatman	Assistant Administrator
J. Doornenbal	Mechanic
A. Bosker	Storekeeper

France:

O. Vincent	Secretary

South Africa:

J. P. Kaufmann	Assistant Astronomer
H. Petit	Station Manager
M. Petit	Assistant

Local Staff and monthly paid Labour in Chile as at 31 December 1965

In La Serena — La Silla

H. Carrasco P.	Camp Supervisor
J. Palisson B.	General Technical Assistant
R. Riebl P.	Purchaser (+ Inventories)
J. Rodríguez L.	Electrician
A. Cuthbert T.	Secretary
A. Urquiza U.	Labour Clerk
B. Melys R.	Driver
A. Rozas L.	Transport Foreman
E. Figueroa C.	Technical Assistant
M. Valenzuela R.	Driver Caterpillar
L. E. Avalos	Driver
N. Navea Z.	Driver
E. E. Figueroa	Assistant Purchasing Department
I. Rodríguez R.	Assistant Storekeeper
C. Herrera V.	Assistant Accounts Department

In Santiago:

J. A. Briggs	Assistant Administrator
F. Vásquez M.	Office Clerk
C. Fritzsche	Supervisor Guest House

Fig. 1:
Cylindrical House of the Objective Prism Astrograph with other accommodations of the Zeekoegat Station.

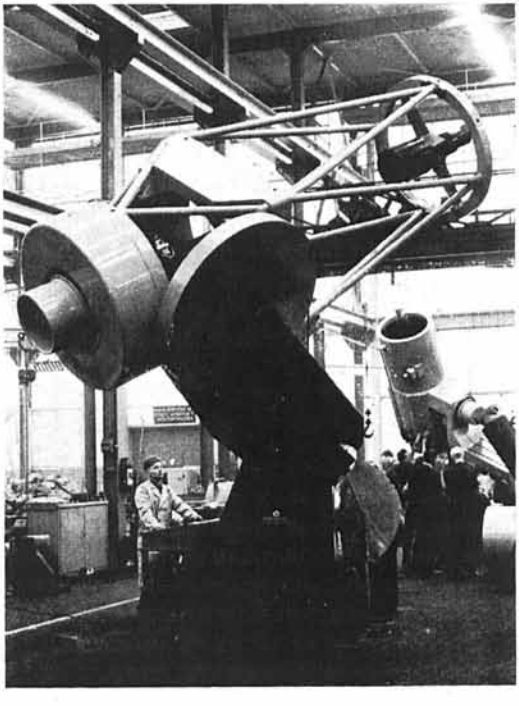


Fig. 2:
The Photometric Telescope in Rademakers' Works in Rotterdam.

Fig. 3: Air view of Campamento Pelícano. Entrance at the right, near lower margin. Beginning of the mountain road near centre to the left.

Fig. 4: Air view of the middle part of the mountain road.

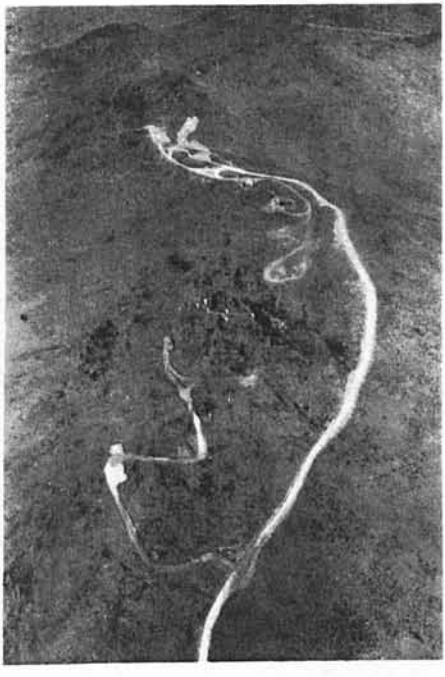


Fig. 5: Air view of ridge and summits of La Silla. Arriving road at lower middle; branching to left goes to Hostel and Dormitory site; upper half shows the instrument site; in the upper left corner main summit and second summit; at its foot sites for a store and a camp.

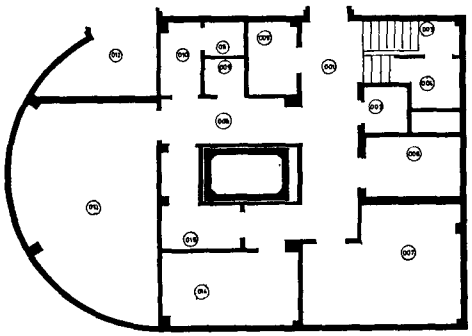


Fig. 6: Ground Floor

001 Entrance
002 Lift
003 Staircase
004 Lift Motor
005 Switch Board
006 Mech. Equipment
007 Office
008 Corridor
009 Janitor's Closet
010 Toilet
011 Toilet
012 Hoist
013 Office
014 Pantry
015 Stores

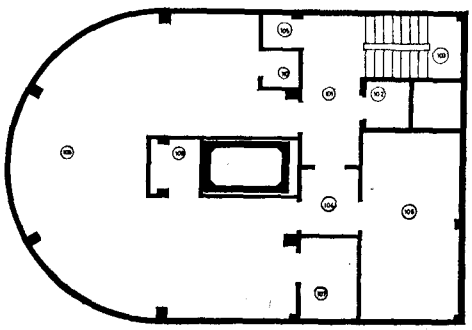


Fig. 7: First Floor

101 Hall
102 Lift
103 Staircase
104 Sluice
105 Janitor's Closet
106 Dark Room
107 Storage
108 Laboratory
109 Mech. Equipment
110 Storage Closet

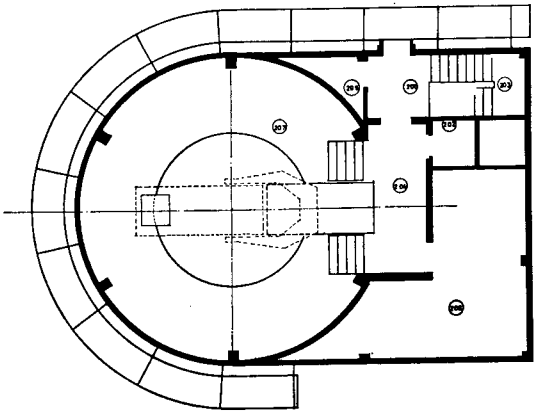


Fig. 8: Second Floor

201 Hall
202 Lift
203 Staircase
204 Passage
205 Janitor's Closet
206 Storage
207 Observation Room with central Rising Floor

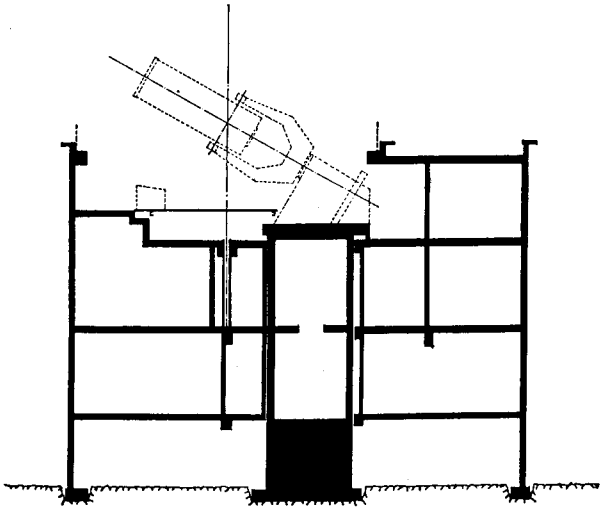


Fig. 9: North-South Section

Rising Floor below Instrument

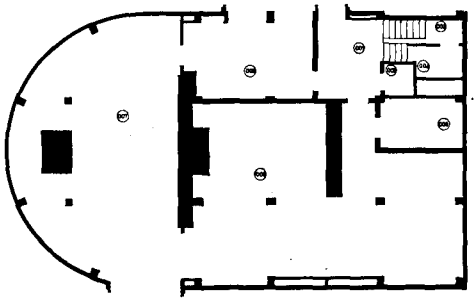


Fig. 10: Ground Floor
001 Hall
002 Staircase
003 Lift
004 Lift Motor
005 Office
006 Laboratory
007 Aluminizing Plant

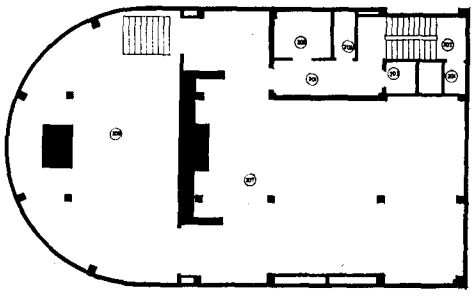


Fig. 11: Second Floor
201 Corridor
202 Staircase
203 Lift
204 Janitor's Closet
205 Toilet
206 Pantry
207 Laboratory
208 Store

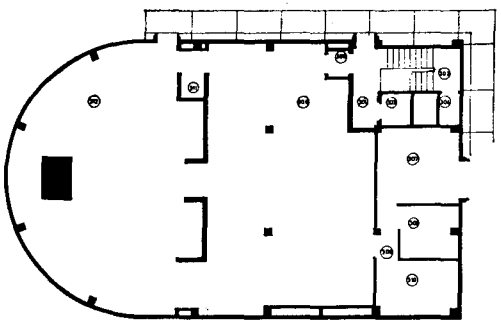


Fig. 12: Third (Observation) Floor

301 Corridor
302 Staircase
303 Lift
304 Janitor's Closet
305 Sluice
306 Spectrograph Room
307 Office
308 Sluice
309 Laboratory
310 Dark Room
311 Sluice
312 Observation Room

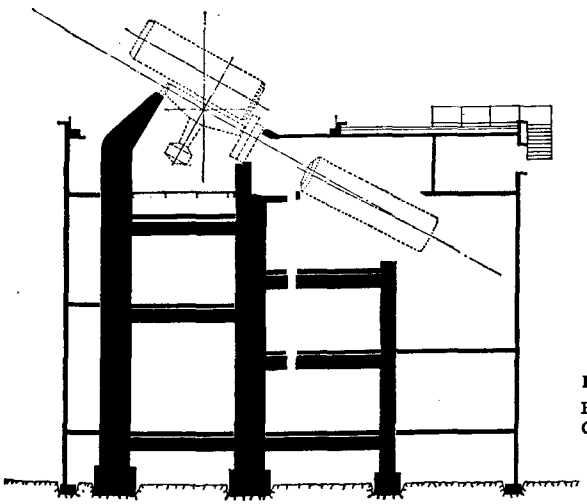


Fig. 13: North-South Section
Rising Floor below instrument.
Coudé Spectrograph dashed.

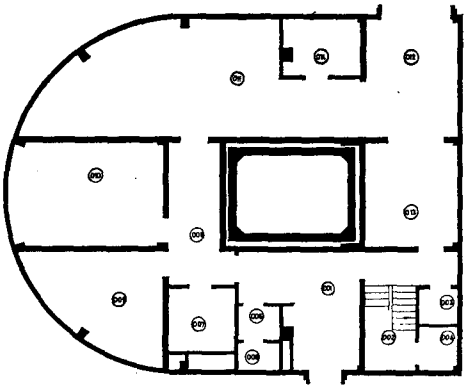


Fig. 14: Ground Floor

001 Entrance Hall
002 Staircase
003 Lift Shaft
004 Lift Motor
005 Toilet
006 Toilet
007 Pantry
008 Corridor
009 Office
010 Office
011 Store
012 Hoist Room
013 Mech. Equipment

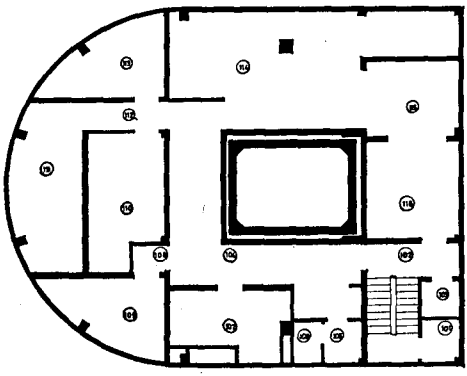


Fig. 15: First Floor

101 Janitor's Closet
102 Staircase
103 Lift Shaft
104 Corridor
105 Toilet
106 Toilet
107 Store
108 Sluice
109 Dark Room
110 Dark Room
111 Dark Room
112 Sluice
113 Dark Room
114 Laboratory
115 Hoist
116 Switch Room

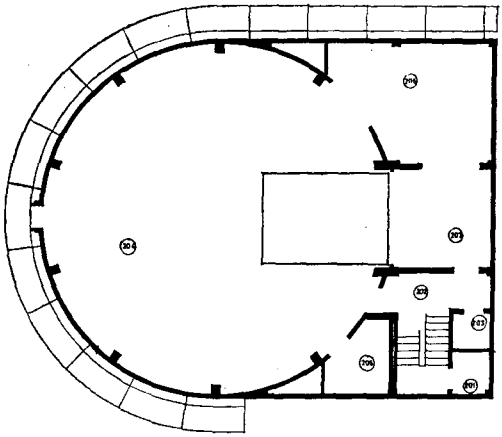


Fig. 16: Second (Observation) Floor
201 Janitor's Closet
202 Staircase
203 Lift Shaft
204 Observation Room
205 Plate Changing Room
206 Hoist
207 Mech. Equipment

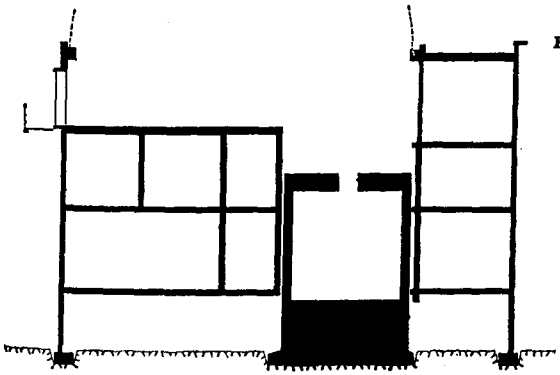


Fig. 17: North-South Section

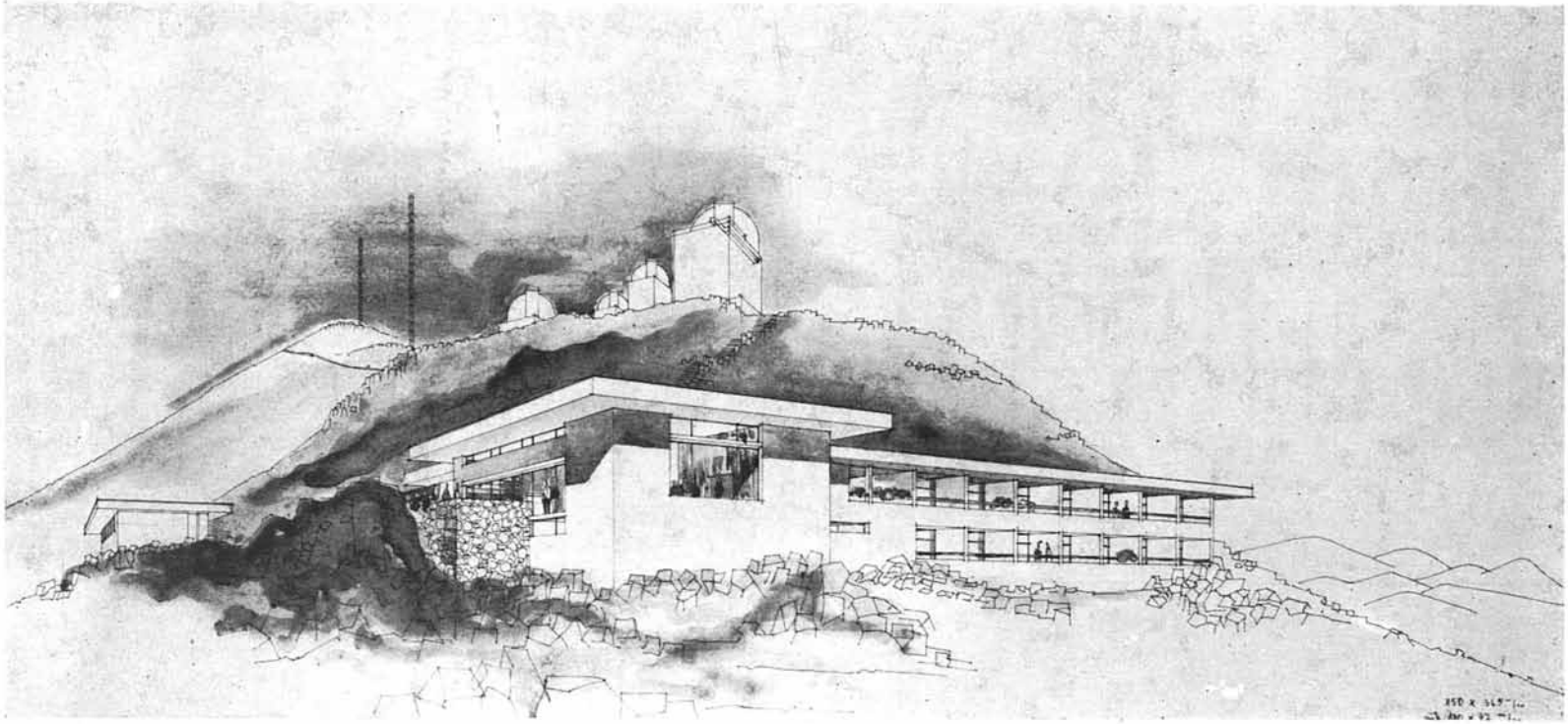


Fig. 18: Architectural Draft of Hostel on La Silla

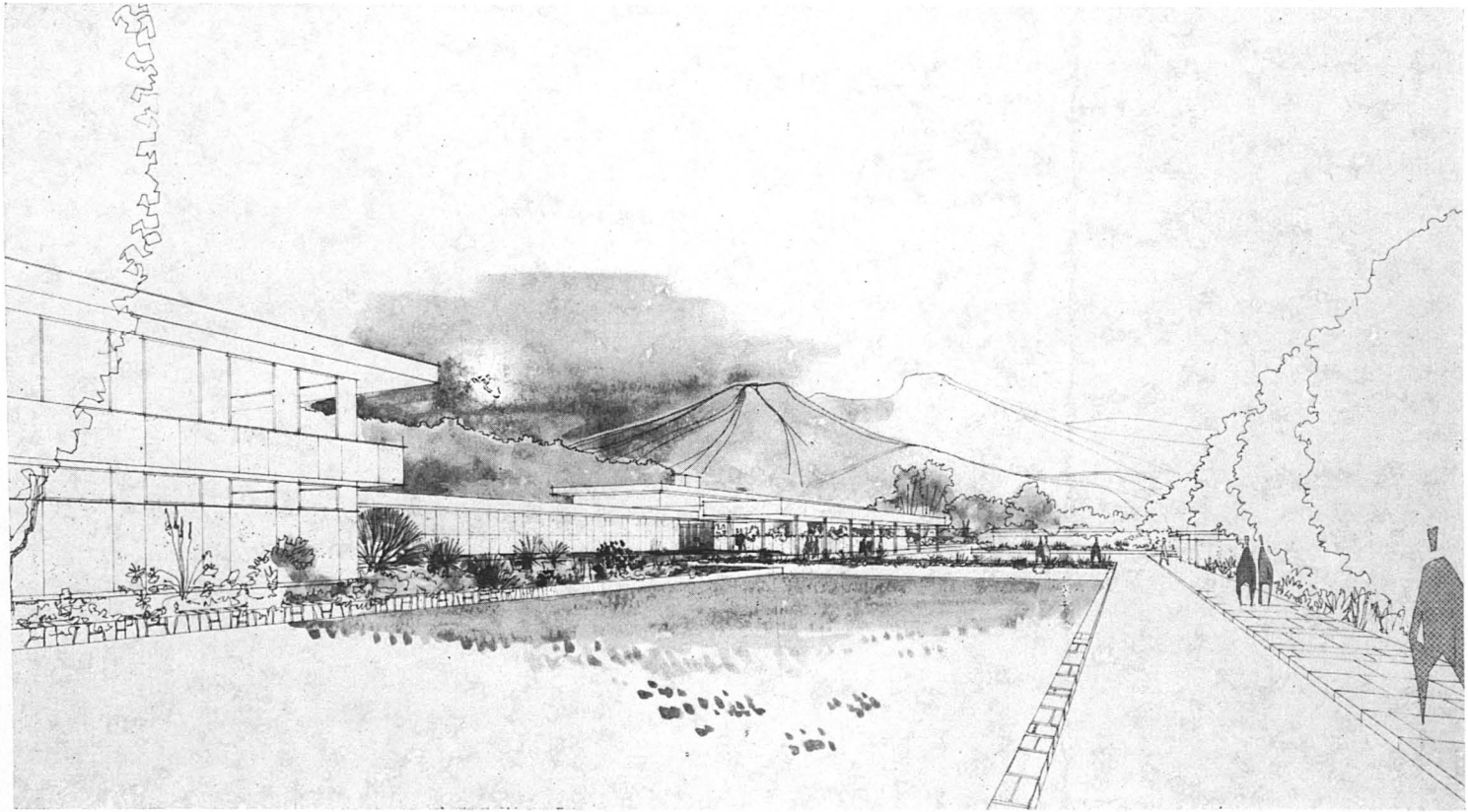


Fig. 19: Architectural Draft of complete Headquarters Building in Santiago.
(Only part of it will be constructed in the first period.)