



Paranal

(October 1992)

Picture 1: Paranal as seen from the NTT-peak. The truck, visible at the top, gives an idea about the dimension of the platform. – Picture 2: The new shape of the mountain clearly stands out against the deep blue sky. – Picture 3: Access road to the VLT control building. – Picture 4: Upper part of the access road leading to the platform. – Picture 5: Sunset light illuminates the wall of an excavation for a telescope basement. – Picture 6: Excavation for the basement of Telescope Unit 4 – Picture 7: Excavators at work.

Photos by H. ZODET, ESO



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The principles of freedom of association for their staff are implemented in international organizations exclusively through their own legal system which, in case of ESO, recognizes the jurisdiction of the Administrative Tribunal of the International Labour Organization in the case of disputes between the organization and its staff.

At ESO this legal system consists of the Combined Staff Rules and the Local Staff Regulations which foresee the election of staff representatives for the interaction with the Executive.

At the same time ESO has no objection to local staff being members of national trade unions. Such unions can, however, not become the recognized discussion partner in matters of the local staff.

It must be emphasized that the International Labour Organization has confirmed ESO's position.

International organizations employ local and international staff. International staff at ESO, as in many other International Organizations, is recruited and remunerated on a different basis to that of local staff. At the same time, following a long-standing Council policy, the remuneration of the ESO local staff is based on the level of the best-paying employers in Chile.

The Local Staff Regulations are at present under revision and will be discussed in a specially appointed Working Group of the Finance Committee starting in January 1993. The proposed revision of the Local Staff Regulations has been discussed with a special Local Staff Advisory Committee and local staff representatives will participate in the work of this Working Group.

G. BACHMANN, ESO

Preparation of Paranal

In November the Interbeton contract for the levelling and landscaping of the Paranal site of the VLT Observatory was completed with the signature of the protocol of acceptance of the work.

The top of the mountain now presents a plateau 2632 m above sea level in which specific excavations for the foundation of the four 8-m telescopes and the control building were dug out. A total volume of about 350 000 m³ of rocks was removed during one year of hectic activity and the result is illustrated in the pictures presented in this issue of the *Messenger*. Immediately after the conclusion of the Interbeton work a geological and geotechnical investigation of the characteristics of the soil at the location of the telescopes and control building was started by Prof. Antoine of the University of Grenoble.

The main conclusions confirm the early results established in the previous explorations when one considers both the geological model for the foundation of each telescope and the estimated geotechnical characteristics of the rock masses involved.

Foundation conditions are excellent for all four telescopes. The presence of an important strip of much foliated diorite at the location of telescope No. 4 is not worrying for the stability, even if it is impressive when looking at the map. The main reasons are, firstly, the strongly reinforced concrete foundation slab acts as a bridge stepping over the shear zone and secondly, the settlements to be expected on such a zone, if they are

about ten times more than those of massive rocks, remain very small with no consequences for the concrete.

The stability of the foundation slabs with respect to sliding under seismic effects is widely insured.

The control building also presents excellent conditions with respect to the small loads to be exerted on the footings, and the dip of the rock layers towards the heart of the slope which is very favourable.

Mining Activities

ESO has been informed of a plan, exploring the possibility of a large-surface salpeter mine to be opened in the south/south-east of Paranal outside the ESO property at a distance of approximately 21 km from Paranal.

Explorations have been terminated and one is waiting now for the investment decision of the owners of this mine before starting possible exploitation. The possible effects of dust and light pollution on Paranal are presently being studied. In this connection it is noted that 85 % of the wind is in the north-south direction and only a small portion of the dust, and under unfavourable conditions, may drift to the north at altitudes which are not yet clearly determined.

The mine has already informed ESO that it is willing to discuss protective measures in favour of the observatory, should it be decided to start exploitation of the mine.

M. TARENGHI, ESO

ESO to Help Central and Eastern European Astronomers

The Council of the European Southern Observatory¹, meeting at the ESO Headquarters in Garching on December 1-2, 1992, has decided to initiate a Programme by this organization, aimed at supporting some of the scientifically most active and internationally highly esteemed astronomical institutes and research groups in Central and Eastern Europe (C&EE).

Earlier this year, the ESO Council established a special Working Group to provide advice about ESO's future rela-

tions with C&EE astronomy under the recent changes in Europe. At the same time, there have been numerous reports about the steadily and dramatically worsening situation of astronomy in these countries, even the possible demise of some of the C&EE institutes and observatories. In many places it now seems that astronomy is in a particularly difficult situation when compared to some of the more applied sciences.

Following consultations with many individual C&EE and West European astronomers and authorities, the Council Working Group concluded that immediate action should be taken by ESO. It recommended that a diversified programme of support to some of the sci-

entifically most active institutes and research groups in the C&EE be initiated.

The Council agreed that ESO, as the major European astronomy organization, and with its many links to individual researchers, scientific institutes and observatories as well as to policy makers, is in an optimal position to assess objectively the very diverse needs and to provide support to C&EE astronomy in a non-bureaucratic and cost-effective way.

The Council resolved that a total of up to 500,000 DM from the ESO budget will be made available for this purpose during each of the next three years. Still, it is obvious that ESO within its limited means can only muster a small fraction

¹ The Council of ESO consists of two representatives from each of the eight member States. It is the highest authority of the organization and normally meets twice a year.