

The 3.6 m Telescope on La Silla

The 3.6 m telescope project is progressing well reports Dr. S. Laustsen from La Silla. The transfer of the mechanical parts from the ship to the mountain was supervised by D. Plathner from the ESO TP Division. This is his story about four exciting days:

In the morning of April 7, 1976—after a long trip of about eight weeks—the Spanish motorship "Riviera" finally arrived in Coquimbo with the mechanical parts of the 3.6 m telescope in its hold.

An armada of 23 heavy trucks was lined up opposite the ship: more than 450,000 kg were waiting for unloading... 36 truck drivers and helpers, 56 dockers and about a dozen Creusot and ESO people had to coordinate their work. Walkie-talkies snarled their commands. The first boxes showed up and were placed onto the trucks, accompanied by excited shouts from the dockers.

An exciting and for the uninitiated visitor somewhat complicated show began. Truck after truck was ordered to the shipside and one or more boxes were lowered by the crane. The loading of the trucks was planned in great detail, and the trucks were called upon according to the appearance of the crates.

Already at 5 p.m., 80 per cent of the cargo had been safely loaded according to the planning, and it became clear that the operation would be finished a day earlier than expected.

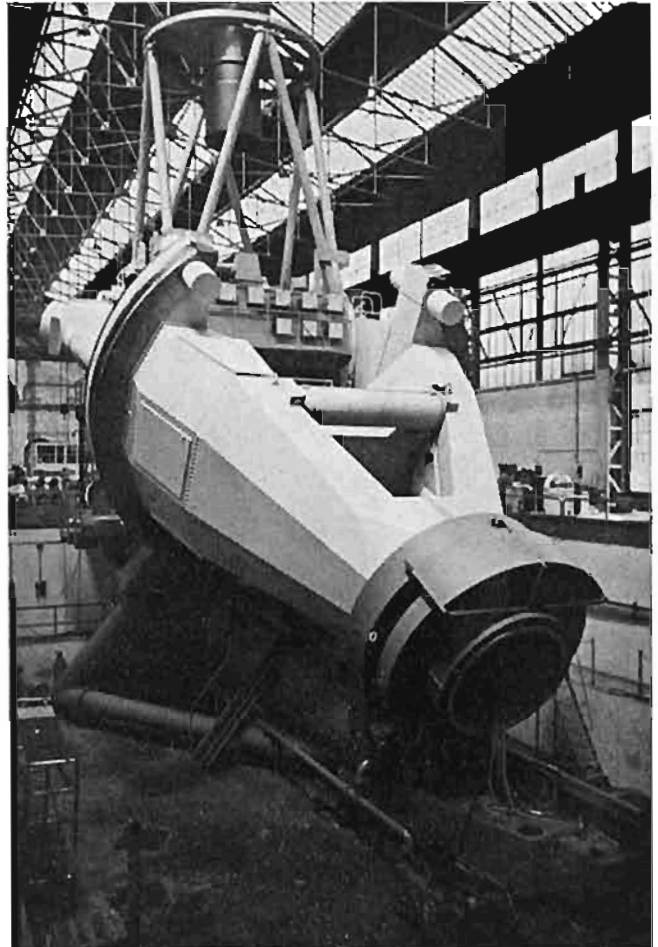
Early the next morning, a 500 m long row of heavily-loaded trucks were waiting for the signal to leave for Pelicano. At 7.30 a.m., the police escort switched on its flash lights, the whole area was trembling by the motor noise and the precious caravan got under way. The speed was low and the sun came out early so that the check-point of Incahuasi—about 100 km north of Coquimbo—was reached only after lunch time.

ESO had provided for a rolling restaurant, and an excellent meal was served to more than fifty people aside the Panamericana under the burning sun.

At 3 p.m. everybody continued and started the attack on "La cuesta de pajonales", the last high pass before the turn-off of the ESO road to Pelicano. There the big trucks arrived at sunset and were halted on the "ring-road" of the camp, giving a nearly perfect imitation of an old prairie-schooner camp.

The third day was full of problems. Nearly all trucks had difficulties in climbing certain passages on the La Silla road. Two heavy front-loaders and two big scrapers had to give permanent assistance to the trucks (which were only 60 per cent charged) and pull them through the sharp bends at kilometre 5 and up the last steep slope from pumping station No. 2.

But also this day could be finished successfully. At about nine o'clock in the evening, all trucks had reached the parking area on the top of the mountain. As unloading had already started the previous day, it was only a matter of hours on the fourth day, before the boxes were all stored in the area around the Danish and GPO telescope buildings.



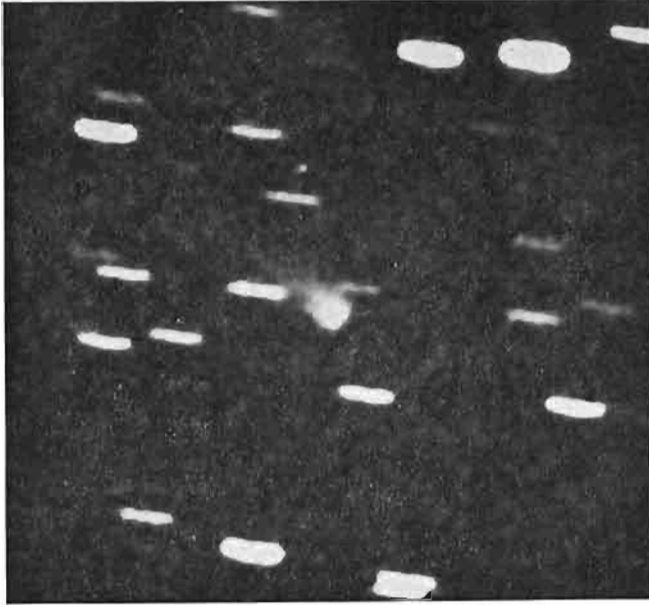
To end this story about excellent cooperation and goodwill of all participating people, it should be added that the last box had not yet touched the ground when the crew of Creusot were already working with their motor-saw to open the crates and to prepare the king-size Meccano of the ESO 3.6 m telescope for assembly.

Another Fine Comet from ESO

The European Southern Observatory was certainly not built for the noble art of comet-hunting, nor does this kind of astronomy constitute one of ESO's main lines of research. Nevertheless, the name of ESO was recently connected with two important discoveries of "haired stars".

Comet Schuster (1976c)

The third comet of 1976 was found on March 1, 1976 by Dr. Hans-Emil Schuster, in charge of the ESO Schmidt telescope. He noticed the faint, diffuse trail on a plate taken for the ESO (B) Survey a few nights before. Observations on March 2 to 6 confirmed the comet and a first orbit by Dr. B. Marsden, Cambridge, Mass., USA, showed that Comet Schuster was very far from the Sun. Further observations at ESO and other observatories around new moon on March 30, made it possible to confirm that the comet has the largest perihelion distance on



Comet Schuster on March 6, 1976, 40 min. exposure with ESO 1 m Schmidt telescope.



Comet West on March 4, 1976, 10 min. exposure by C. Pallard (CERN) and B. Pillet (ESO) from Col de la Faucille, near Geneva.

record, 1,030 million kilometres. The perihelion passage took place already in January 1975, but no plates appear to have been taken early 1975 in the corresponding direction.

With its large distance (on June 1, 1976, Comet Schuster is 1,138 million kilometres from the Earth, almost as far as the planet Saturn), this comet will never become a bright object. However, its present apparent magnitude (16–17) indicates that it is indeed a very large comet. It is a most interesting object and will certainly be observed with large telescopes during the coming years.

Contrary to comets close to the Sun, the icy nucleus of Comet Schuster may be observed directly without interference of surrounding gases (the coma), and its albedo (ability to reflect light) may be determined. This in turn gives important information on the constitution of the cometary nucleus, which is believed to be a small piece of material left over at the formation of the Solar System.

Comet West (1975n)

Proving once more that predictions about the brightness of comets are difficult if not impossible, this comet (cf. the "Messenger" No. 4, March 1976, page 8) reappeared on the eastern morning sky in early March, almost 2 magnitudes brighter than foreseen. It thus became one of the brightest in the 20th century and was observed intensively by amateur and professional astronomers alike. Some results have already been published in the IAU Circulars. Of special importance were the discovery of CO^+ in the coma during extreme ultraviolet observations from a NASA rocket and the measurement of two OH emission lines at 1665 and 1667 MHz with the NRAO 91 m radio telescope. The head of the comet broke into four pieces at the time of perihelion passage, probably due to internal stresses from the intense heating by the Sun. The four nuclei slowly disperse under continued observation by those astronomers who hope that the relative motion may give clues to the comet's mass, a quantity largely unknown for comets.

Comet West now recedes quickly from the Sun and, due to perturbations from the major planets, it will only return in about one million years from now.

The ESO Guesthouse

Imagine that you sit twenty or more hours in a narrow seat in the cabin of a plane, packed to the limit with passengers, their bags, boxes and any other conceivable kind of container for "hand"-luggage; imagine that you finally, after those long hours, step out in a foreign city, a foreign country, on another continent, even another hemisphere. Or imagine that you are on your way back to Europe after several, possibly many weeks of hard observing on La Silla, that place where even hard-boiled observers finally start mumbling secret prayers for just one, oh just one night with enough clouds to . . .

The pioneers of ESO could very well imagine this. And they also knew the remedy: a quiet place in Santiago de Chile, where tired astronomers could regain their forces before and after their observing runs. They found the ideal place, a fairly large private house on Calle