

Report about the Inspection, carried out by the compaign of Carl Zeiss (Jena) and NRIAG staff (EGYPT) of M1 and the supporting system of the Kottamia Telescope.

Monday, August, 30th, 1999

The compaign of Carl Zeiss (Jena) together with the people of TACO arrived to the Kottamia site at 10 o'clock in the morning, Monday, August 30th, 1999. They joined the NRIAG group up to the Dome. The telescope was found pointing to the Zenith. No scratches or new painting or any abnormal signs are noticed. No changes in the colour of the Telescope could be noticed from outside.

- The group of NRIAG technicians, as agreed upon, started to dismount the CCD camera with its support, after fixing the telescope with two strong ropes in order to be sure of the verticality of the telescope.
- The Zeiss staff started to remove the cover at the back of the cell for preliminary inspection. It is worth while to point out that on 21st, July 1999, the representatives of Zeiss in Cairo (TACO), have been authorized by Zeiss to go to Kottamia site for tracing the problem. They have removed the cover of the back of the cell. They have found two free pads, as well as two lateral discs with broken screws easily picked up by TACO people. (as described by TACO Fax No. 3561 Fax /99/3 on 21.7.1999).
- Also it has been found by Zeiss team that the counter weights of the systems no. 12 and 13 are free movable.
- The pads, which were picked up by Eng. Sami from TACO, were then visually inspected by the team of Zeiss. It is reported by Zeiss team that the brass diaphragm discs of the two pads No. 12 and 13 are deformed and one fixing screw of the brass diaphragm disc of one pad was found scratched.

- After words, the team of Zeiss started to dismount the cell with the main mirror (M1) inside it.
- All other radial systems, as reported by Zeiss team, are visually inspected. They found that all the other brass diaphragm discs are deformed as the systems No. 12 and 13.
- The gap between each pad and the mirror side has been measured by Zeiss people with gauge of thickness 0.05 mm and no clearance was found. Zeiss team reported that this and the motion of the counter weights in the cell indicate that the pads are still fixed. But NRIAG staff was not quite sure about the gluing of the rest of the pads since the M1 was not lifted from its cell. Because of the deformations noticed in the brass diaphragm discs, the Zeiss team decided not to dismantle the M1 from its cell. This is based on safety reasons as they mentioned.
- A mark in a thin dust layer covering the surface of M1 pointing little bit north of the east was noticed while the free pads are No 12 and 13.
- Photographs for the rest of the pads have been taken by Zeiss team with their numbers.
- Zeiss team left the main Mirror (M1) in its cell unmounted and covered it with a wooden and plastic covers. The Zeiss team requested the NRIAG staff to leave the mirror as such untouched for safety reasons.
- Zeiss team weighed:
 - The CCD Camera with its adapter.
 - The two power Boxes.
 - The whole system support,

and the distance between the interference of the system support and the counter weights was also measured (1500 mm).

Its worthy to mention that NRIAG staff comment that the axes [e.g. No. 161499 :001.11(4)] of all the systems are short. NRIAG staff believes that the shortness of these axes cannot guarantee a permanent stable position of M1 in its cell through the movement of the telescope in different positions and directions.

- It is agreed that the two free pads and the two broken lateral discs to be handed over to Mr. Jochen Kleinle From Zeiss to take it with him to Zeiss Jena in order to carry out further inspections and laboratory tests and to return them back to NRIAG within one month from now.

Zeiss representative



NRIAG representative

M.A. Hamdy
31/18/99

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recieved the two free pads and the two broken lateral discs to handle them to ziss Jena.

 31.8.99