S-D EXTRA VEHICULAR ACTIVITY MIR-CREW:

Dn 26 Jan. '90 between 1300 and 1615UTC the MIR-crew made their 3d EVA. They left the station via the air-lock of the Kvant-2 (Module-D). They used and tested a new type of spacesuits. These suits enable the cosmonauts to work autonomously in space for 6 hours. This type of suit will also be used during the EVA-s with the SPK (space motor byke). Apart from the autonomous life support system there is also the possible to have a radiocommunication (via a TDRS) direct, so without the use of the transceiver abord MIR. They checked this system during this EVA. They spoke about a communication via Antares apart from the link via MIR's systems. They had reception problems, also sometimes with the contact between the cosmonauts. Perhaps that is the reason to shorten this EVA (actual EVA 3 hrs 2 mins, planned had been 4.5 hrs.)

During the EVA they performed the following tasks:

- 1. checks of the new suits. (About the communication tests they spoke during pass in orb. 22600, 1457UTC; other matters they reported after returning "home".
- 2. the installation of a TV-camera on a steerable platform. The camera will be used for ecological observations and can be controlled by Earth without interference of the crew. For the aiming of the camera they used the system used during the VeGa project (Venus/Halley mission).
- 3. the installation at the outersurface of the station of several materials to be studied in open space.

When MIR passed during the next orb. (22601, 1631UTC) Viktorenko and Serebrov were back on board again. During the vacuum status of the air-lock of Kvant-2, they checked 2 other spacesuits. So these activated suits looked like cosmonauts and people who could follow the TV-covering of Moscow TV got the impression that 4 cosmonauts worked o/b MIR.

NEXT EVA: In the beginning of Febr. '90 with the SPK (MMU), also using the airlock of Kvant-2.

PLANS FOR NEXT FUTURE:

Launch of Soyuz-TM9 with the next crew on 11 Febr. '90. Vitorenko and Serebrov will return with Soyuz-TM8 on 19 Febr. '90 (so again according provious plans.)

Rulef crews:

1st crew: Solovyov, A.Ya. (captain with a lot of experience), Balandin, A.L. (engineer, a novice).

2de crew: Monakov, G (captain, a novice), Strekalov, G. (engineer, experienced cosmonaut).

MODULE-T (KVANT-3): Planned launch: towards the end of March '90, docking to MIR in the beginning of April '90.

MIR's altitude: The new gyrodines on Kvant-2 give enough stability that orbitchanges by the engines of Progress-M2 were possible. This happened 2 or 3 times: between 16 and 17 Jan. and on or just after 18 Jan. 1990. Apogeum/perigeum now appr. $401/399 \, \mathrm{KM}$.

Orbitelements: With LOS-times determined by my radio-observations Wim Holwerde of the Working group Art. Satellites calculated new elements, very accurate thusfar.

Epoch: 90.018.844722. Drag: 0.0005. Incl: 51.6211. RAAN: 1.54267. ECC: 0.0001. Arg. Per: 55. MA: 305. MM: 15.5575. Orb. Nr.: 22479

C.M. v.d. Berg. NL-9165/A-UK3202