

SOYUZ-TM6 DOCKED TO MIR/KVANT ON 31-VIII-1988 AT 0541UT.

On the second day of S-TM6's flight this s/c was appr. 23 minutes behind MIR. Gradually it was approaching MIR. During every pass through my acquisition circle there has been radiotraffic on 121.750 mc. On the first day of the flight only the voice of Lyakhov could be heard; Polyakov and Mahmood still had problems with the weightlessness. The fact that they did not feel all too well that day has been confirmed later on. The 2d day also Polyakov could be heard (callsign Proton-dva). Lyakhov reported that they all 3 felt well and have had a good nights rest. At appr. 0530UT on 30-VIII (before coming in range here) they had executed an manoeuvre to change their orbit. This was necessary for a good rendez-vous with MIR on the morning of 31-VIII. During the pass of S-TM6 between 0712 and 0717UT the cosmonauts checked all what they needed for the approach and docking operation. Polyakov assisted Lyakhov during these checks. The same checks took place during a next pass (1016-23UT). Instruments checked were the V.S.K. (a system to observe the approach on a display) and the accelerometer. Meanwhile the crew aboard MIR did their normal work. They also checked a communication system as this did not work as it had to do. The Telemetry transmitter of the S-TM6 worked continuously. This in contradiction to the same transmitter aboard MIR. If switched on this is always a few minutes before LOS. The TLM frequencies of S-TM6 are somewhat higher than those of MIR. 165.885 and 166.138 (+ or - doppl.). I did not hear any contact between the both s/c during the ferryflight.

31 Aug. 1988. Docking day.

The first pass of MIR (and also that of the S-TM6 at that time on a few hundreds of meters from MIR) was during orb. 14564 from 0529-0534UT. The pass was -as always during dockings- a short one, with the highest elevation 2 degrees for only 3 minutes. MIR and S-TM6 moved from S.E. to E. in a distance of appr. 2000 KM. The radiosignals of both s/c were loud and clear. They used their own frequencies. The approach of S-TM6 took place in the "automatic" mode and Lyakhov, now and then prompted by Polyakov, reported only a few details: approach and target were stable, exactly in centreline of the V.S.K.. The only distance he reported was 165 M. Others (TsUP and possibly also MIR) were able to see this on their displays. Polyakov also reported the S-TM6 net voltage: 20 Volts, corrected by Lyakhov to 25 Volts. On the MIR frequency only a few remarks could be heard. Titov said that his display gave 160 M and that of S-TM6 164 M. The docking itself took place at 0541UT, so 7 minutes after LOS here. In NEWSMIR.041 I, in my youthful recklessness I gave the estimated time for docking as 0540UT. So a good shot! This is not for 100% the merit of your scribe, but also of the good old BBC-B with an modified predicting program of NGS-Hobbyscoop! During the approach operation I also monitored a direct report from TsUP via Radio Moscow. Berezovoy, commandant of the stand-in crew, commented all what was going on. In the next pass of MIR in orb. 14565, 0707-11UT, the MIR cosmonauts were about to open the hatch to the "intermediate chamber" (between Kvant and S-TM6). They just had to wait for a stable TV-communication. Manarov was responsible the Radiotelephony and Titov had to open the hatch. Manarov, speaking via an intercom, asked the "Protons" to enter the "intermediate chamber" and the hatch was opened at 0709 or 0710UT. Manarov could see the newcomers soaring in his direction. The first meeting started just after LOS so I had to wait for the next pass for more news. In that pass the first statement in the Afghan language could be heard: only a few words could be picked up: Nadzhibula, Kabul, and Kandahar, the rest -English speaking friends believe me or not- was "double dutch" even for me! Hope to find an Arabist to translate this for us! So MIR will be crowded until the 6th of Sept. They will execute 24 experiments. During one of the last passes on docking day there has been a conversation about a technical problem with leaking humidity. It had to do with "zaglushiteli" (dampers?). The "zaglushiteli" were airtight, but nevertheless advise from expert was badly. Hope to hear more about the problem tomorrow. Will do my best.

Continued.

Plot of orb. 14564, 14565, 14566, 14567, 14568, 14569, 14570, 14571, 14572, 14573, 14574, 14575, 14576, 14577, 14578, 14579, 14580, 14581, 14582, 14583, 14584, 14585, 14586, 14587, 14588, 14589, 14590, 14591, 14592, 14593, 14594, 14595, 14596, 14597, 14598, 14599, 14600, 14601, 14602, 14603, 14604, 14605, 14606, 14607, 14608, 14609, 14610, 14611, 14612, 14613, 14614, 14615, 14616, 14617, 14618, 14619, 14620, 14621, 14622, 14623, 14624, 14625, 14626, 14627, 14628, 14629, 14630, 14631, 14632, 14633, 14634, 14635, 14636, 14637, 14638, 14639, 14640, 14641, 14642, 14643, 14644, 14645, 14646, 14647, 14648, 14649, 14650, 14651, 14652, 14653, 14654, 14655, 14656, 14657, 14658, 14659, 14660, 14661, 14662, 14663, 14664, 14665, 14666, 14667, 14668, 14669, 14670, 14671, 14672, 14673, 14674, 14675, 14676, 14677, 14678, 14679, 14680, 14681, 14682, 14683, 14684, 14685, 14686, 14687, 14688, 14689, 14690, 14691, 14692, 14693, 14694, 14695, 14696, 14697, 14698, 14699, 14700, 14701, 14702, 14703, 14704, 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