

22 MARCH 1991

LAUNCH PROGRESS-M7 ON 19 MARCH 1991:

This freighter has been put in orbit on 19/3 at abt. 1200 UTC for a 2 days flight to MIR.

FIRST DOCKING ATTEMPT PR-M7 FAILED ON 21 MARCH 1991:

A few minutes before MIR and Progress-M7 came in our range the OBC of Pr-M7 stopped the operation. The distance between Pr-M7 and the MIR station was 500M. So instead of approach radiotraffic during pass in orb. 29144, 1418-1424UTC, Manarov (at big.window of Module-D) and Afanasyev (at window in Base Block) could be heard reporting the their visual observation of Progress-M7. Man. had the impression that Pr-M7 turned around its axis. The cosmonauts were still observing Pr-M7 during the next pass (orb.29145). Pr-M7 flew before the MIR complex. The beacon and TLM transmitters of Pr-M7 could be heard. In the evening of 22 March at abt. 1942UTC Pr-M7 and MIR could be observed visually. (pos. the Hague: Pr-M7 TCA 174103 UTC MIR TCA 174158UTC. So difference 55 sec. distance between 2 objects appr. 481 KM!)

STATISTICS:

In the long operational history of Progresses and Progresses-M this is for the first time that a docking attempt fails. Only the big modules (Kvant-1, Kvant-2 and Kristall) had given problems.

NEXT ATTEMPT TO DOCK: SATURDAY 23 MARCH 1991.

AMATEURRADIOTRAFFIC:

MANAROV is very active with packet radio, recently on 145.325 MC, but also on 145.550 mc. On 20 March during two passes (29130/131 at 1653UT and 29131/132 at 1827UTC) he used phone to have interesting conversations with French radioamateurs in Limoges. He spoke with a Russian speaking relative of Tognini, now in Moscow. Afanasyev in meanwhile spoke with TsUP on 143.625 mc and he and Manarov relayed Tognini's greetings to Limoges.

2D DOCKING ATTEMPT PROGRESS-M7 MIR FAILED ON SAT. 23 MARCH 1991:

During the first pass in orb. 29175, 1352-1358UTC, the last phase of the approach was going on. Manarov visually observed the approaching Pr-M7 via the big window of Module-D. Afanasyev followed the datastream on the display of the Kurs-system. During the pass before LOS here all went well.

In the beginning the distance was 173M and towards LOS 56M. During the next pass it was obvious that the docking attempt failed. Pr-M7 was still autonomous: TLM and beackon (166, 165 and 922) still active. Radiotraffic also gave these indications. A recording from TsUP proved that there has been a very dangerous situation: when the distance was 5 M at abt. 1404UTC, the Kurs system switched off and Pr-M7 passed MIR underneath in a distance of appr. 5 M, before turning away. Pr-M7 after that flew behind MIR. Serebrov, observing the operation in TsUP, commented the event and stated that a collision might have been possible.

CAUSE: Soon after the event Manarov and TsUP spoke about possible causes. He was interrogated about one of his EVA-s, during which he possible hit and damaged one of the Kurs-antennae. He advised the authorities on TsUP to study the film made during that EVA as to see whether this is true or not.

FURTHER PLANS:

A serious analysis has to be made before trying a 3d attempt.

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