November 16, 1983 cosmogram-5B Soyuz T-9=142 days (prev max + 28). James E. Oberg, all Copyright @1983, This material may be rights reserved. quoted with proper attribution.

TO OF CURRENT MISSION IN SIGHT? On 10 vember, Moscow World Service (in English) reported that the cosmonauts suit started using a special "have which can imitate conditions on Earth. In this way the crew that has been in orbit for over 4 months is preparing its return to Earth." This confor firms a report in AW&ST, Nov 7 issue, which reports an interview with Aleksey Yeliseyev in Switzerland, to the effect that "the crew...will be leaving the station before the end of "no November." Further, says AW&ST, crews are expected to be sent to new Salyut-7 until early 1984." But the lighting conditions for recovery will not approach optimal (in terms empirically defined by past observations) until after Dec 14. That would be day #170 for Soyuz T-9, an extraordinary increase in the previous mission duration -- so the launch of an unmanned "rescue Soyuz" cannot be excluded. But with a fresh Soyuz, why bring then. If they land the men home at all? Fore then, as Yeliseyev allegedly they will combine a doubtful Said, a demonstrably dangerous Soyuz with night landing (the experience last year was certainly traumatic!).'

DETAILS ON E.V.A. IN PRAVDA (November page 3). A detailed article 4 issue, by "Constructor V. Vladimirov" is accompanied by a stylized drawing of the assembly operation. It is made clear that the two sets of panels were both installed on the center Salyut array, not on the left and right as earlier assumed by some Western obserpanvers. The result increased that el's power output by 50%. The new arrays appear (in the drawing) to 0.5 consist of seven panels, each meters square. One man is working at the wing itself; the other is standing the EVA workstation fully out of at been Thus this has hatch. the times that second) first (and Soviet cosmonauts have actually meously on purpose (Romanenko chko were reportedly so in two minute excellent quality videotape is launched early next year, a crew of the operation, source, some still photographs of the opera- year. I just sold a piece to New Sci-

structure, but analysis has hardly begun. Of interest is one Soviet report that shows two cosmonauts performing this operation in the neutral buoyancy water pool: it identifies them as Leonid Kizim (age 42) and Vladimir Solovyov (37), who evidently were the backup crew for either T-9 or T-10A. probably the former. I expect all have noted that planned EVAs We seem to occur only when Progress vehiare attached -- a Soviet comment cles was that the airlock repressurization comes from the Progress supplies. The 1977 and the Aug 1979 EVAs were Dec contingencies -- no Progress attached. MORE AW&ST FROM YELISEYEV. That same Nov. 7 article also quotes Yeliseyev saying that the Indian cosmonaut would fly in April (prime crew Malyshev, Rukavishnikov, Sharma; backup crew Berezovoy, Grechko, Malhotra). "Yelsealso said several Soviet women vev cosmonaut candidates remain in training, but no new near-term flights with female crewmembers are anticipated." An exact quotation from Yeliseyev: "For the time being, we don't have any new flights planned for them." And as for a second French spationaute mission, Yeliseyev confirmed that the Soviets are not interested and are not discussing it with French officials. EXPLODED COSMONAUTS SEEN IN PUBLIC. the Great October Socialist During Revolution celebration on November 7 (my birthday), there was a televised two-way conversation between cosmonauts Titov and Strekalov in Red Square and Lyakhov and Aleksandrov in orbit. The announcer made no comment on the significance of the identity of the two earthbound cosmonauts, and I do not as yet have the transcript of what was said. ORBIT: Salyut rev 9111, Nov 16/22:01 GMT, 340.34 W. P=91.09, 23.163 deg W per rev. Launch window: 22:39. Landing time: 22:40. Every second day, 48 minutes earlier. Good unmanned windows 18/21:05 and 20/20:09. Another 1443??? DEAD COSMONAUTS: Stay tuned to cosmothe gram-6 for details on cosmonaut canditwo date fatalities Tokov and Boyko. been EDITORIAL: If the Salyut-7 is left fully outside their spacecraft simul- unmanned it is a major setback for the and Soviet cosmonaut program, possibly the Dec biggest since the Salyut disasters of 1977, by accident). We have obtained a 1971-1972. If a new long-duration crew

from a news media handover mission would not be expected and NASA-JSC will be making until summer -- a delay of almost a tions. There is considerable detail on entist discussing this issue. 2