

10 DAYS FOR T-9,  
LYAKH, ALEKSANDROV...  
VENERA-15, 16 HURRAH!

COSMODOGRAM  
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ASSUMING PROGRESS-18 MAKES THE LINKUP, WHAT'S NEXT? CAN THE "OLDEST SOYUZ", T-9, STILL SERVE AS A MANNED RETURN VEHICLE? IF SO, THE RELIEF CREW CAN BE LAUNCHED NEXT; IF NOT, AN UNMANNED SOYUZ MUST GO UP, AND THE RELIEF CREW MIGHT TAKE MANY WEEKS TO FOLLOW. BUT THE GOAL OF PERMANENCE REMAINS UNCHANGED.

LAUNCH ABORT: I SUGGEST THE DESIGNATION "SOYUZ T-10A" FOR THE TITOV-STREKALOV EXPLOSION. THE WINDOW WAS 1938 GMT SEP 26. AND FEDKISTOV SAID IN BUDAPEST THAT THE FIRE BROKE OUT AT L-90 SEC... SO THE TIME OF THE EXPLOSION MAY BE PUT AT 19:36 GMT (SEPT 27 IN "LOCAL BAIKONUR TIME" BUT ALL SOVIET SPACE EVENTS ARE REFERENCED IN MOSCOW MCC TIME, GMT+3 OR +4 SUMMER TIME, APR 1 TO OCT 1, SO I PREFER TO CALL IT THE "SEPT 26 ANOMALY".  
QUANTITATIVE CONFIRMATION FOR A SUSPICION EARLIER VOICED BY NICK JOHNSON & OTHERS THAT THE 2-MAN/3-MAN CHOICE FOR CREW SIZE IS DICTATED BY SALYUT ALTITUDE. I WAS INITIALLY VERY SKEPTICAL BUT THE NUMBERS FIT: AT 91.5~~4~~ MIN (31-REV REPEAT), APPROX 230 MILES, VERSUS 90.8~~8~~ MIN (47-REV REPEAT), APPROX 195 MILES, THERE IS AN INCREASED PROPELLANT REQUIREMENT OF  $\approx 170$  LBS ASCENT AND  $\approx 70$  LBS DE-ORBIT (ASSUME  $I_{sp}$  OF 300 SEC), TOTAL  $\approx 240$  LBS. TO MEET THIS, AN EQUAL WEIGHT MUST BE OFF-LOADED FROM THE SOYUZ - AND THAT IS ONE CREWMEMBER PLUS SUIT, SEAT, & SANDWICHES. WHAT A CLOSELY MARGINAL SYSTEM! I AM NOW A BELIEVER IN THE "3/2 RULE".

INITIALLY THE INDIAN CREW, PRIME, WAS MALYSHEV-RUK.-MALHOTRA, ACCORDING TO PHOTOS IN PRAVDA, BUT NOW THE INDIANS HAVE OFFICIALLY DESIGNATED SHARMA AS PRIME "COSMONAUT-RESEARCHER." DETAILS SKETCHY.

OCTOBER 1 ISSUE OF OGONYOK (1983 #40) HAS MAGNIFICENT FULL BACK PAGE SOKOLOV PAINTING OF SALYUT-7/KOSMOS-1443 WITH SOYUZ T-9 APPROACHING. ACCURACY DUBIOUS, AND I'M STILL BAFFLED BY INTERIOR ARRANGEMENT AND RELATIONSHIP TO MILITARY SALYUTS. I AM HAVING 35-MM CLINES MADE OF IT - WND WANTS ONE?