Cosmogram-8b 1984 March 20 JEO,Rt 2 Box 350,Dickinson TX775<mark>39</mark> SOYUZ T-11 LAUNCH DATE SET. New Delhi radio announced April 3 as the launch date of the Indian guest cosmonaut mission. Crew <mark>is</mark> Malyshev, Strekalov, Sharma (back-Berezovoy, Grechko, Malhotra). Salyut-7 is now near the lower 3day repeating pattern suitable for 3-man missions, and if launch occurs on announced date it will be on rev 11313 with liftoff at approximately 13:10 GMT. Moscow goes to summer time April GMT+4, and New Delhi standard time is GMT+5:30.

STS HIC LIFTOFF NOW SCHEDULED APR 6/N59 GMT This month NASA will once again capture the nation's attention with a fancy flight, the most dramatic mission in years. As the shuttle *Columbia* hovers 310 miles above Earth, astronaut George Nelson will strap on a jet-propelled backpack, step outside the mother ship, and fly the length of a football field to the broken but rotating *Solar Max* satellite and its scythelike solar panels. Nelson will attach himself to the satellite, and

Columbia will move in. A robot arm will grab the satellite and bring it into the shuttle's cargo bay for repairs. When the faulty components have been replaced, Solar Max will be released again to space.

As veteran space writer James Oberg reports in "Sol Salvation," on page 46, NASA is setting many records with this flight, the first attempt ever to rescue a satellite. The idea of snatching large, moving objects from their orbital paths was once the domain only of science fiction, but if the salvage job is successful, this mission will bring us closer to exploiting space as profitable territory.



OBERG

TYURATAM HISTORY SENSATION. In an article in the March issue of Air Force, former CIA photo-analyst Dino Brugioni revealed that the 15 mile rail spur from Tyuratam northwards was built before 1939, probably to support open-pit mining operations (probably by GULag political prisoners:JEO). The big flame pit used by the first pad (45.9235N, 63.3392E) was an old quarry; other flame pits for pads(45.9983N, 63.5606E, and 46.0064N, 63.5806E) are probably similar.

AVIATION WEEK (MARCH 19) ITEMS:
"Soviet Union is developing a
large laser-equipped prototype
military spacecraft for launch on
its heavy Saturn-V-class booster.

which is also completing development. The spacecraft is being designed to attack U.S. satellites and is expected to be launched on the booster within the next two years. The primary mission for the new booster is to place 300,000-400,000-1b. Soviet space station elements in orbit, but the U.S. Defense Dept. has been concerned some time that it also could be used for the type of heavy unmanned protoitype directed-energy weapon now known to be under development." [JEO:Based on other sources I find this to be a credible report -- wish it were not.] "The Soviets have resumed testing at Saryshagan of their SH-08 ballistic missile interceptor used with the ABM-X-3 system..." Its role as a low altitude ASAT is still unclear.

GOLYAKHOVSKIY FOUND, INTERVIEWED. Acting on leads obtained by Mike Cassutt, I located and talked by telephone with Dr. Vladimir Golyakhovsky, author of Russian Doctor. This new book describes a cosmonaut fatality in October 1960, in a fire in a pressure chamber. Dr. G recalls the man was a 25-year-<mark>o</mark>ld Air Force Lieutenant named "Sergeyev", and was definitely a cosmonaut-trainee and not "tester" (Gagarin accompanied him to the hospital and stayed with him until he died). Dr. G's book sadly shows signs of inaccuracies, such as his report that the pilot who died with Gagarin was also named Sergeyev (it was, of course, Seryogin). With caution, however, I think we can obtain some exciting new historical material over the coming weeks as I interview him.

NEW OBERG BOOK SCHEDULED. My next book will be called The New Race For Space, and will be published by Stackpole (Harrisburg, Pennsylvania) in mid-September as a trade paperback at \$12.95. It includes mainly updated reprint (or unpublished article manuscript) material, about half of it Soviet material on subjects since Red Star in Orbit came out three years ago. Topics of interest include Salyut-7, the Soyuz T-8 rendezvous

failure, the Soyuz T-10A explosion, the 150-day mission of 1983 which included first manning of Kosmos-1443, the Soviet mini-shuttle tests, and proposals for a Shuttle/Spacelab/Salyut rendezvous as early as 1985.

STRANGE REPORT ON SOLOVYOV.

Soyuz T-10's FE, Vladimir Solovyov (accent last syllable), was a specialist in Salyut OMS (orbital maneuvering system) and refuelling operations, and was a flight controller at Moscow Mission Control when the Progress-1 was flying in 1978. Later that year he was admitted to the cosmonaut corps. We know his role as backup to Soyuz T-6 (French mission), but Vodnyy <u>Transport</u> (Feb 9,1984,p.1) also "Following the Sovietwrote: French mission, he was in a backup crew together with V. Titov, the commander, and G. Strekalov." What can we make of THIS claim? An author's mistake? A cancelled late-1982 relief mission? [Note: rumor has it that Berezovoy and Lebedev were supposed to have had "Kosmos-1443" launched to them in late 1982, and detailed procedural updates were read up to them aboard Salyut-7, but the launch slipped a bit and the manned mission was extended in order to still try to fly "1443"--but then it was put off several more months, so the men were called home].[We know from Lebedev's diary that the mission was extended an additional 35 days over the pre-launch planned duration].

AND ABOUT LEBEDEV

That same "Lebedev Diary" had an interesting item about his long dry spell between missions. He wrote about the nine years and "five crews" which he had endured before flying again in April 1982. Well, which five crews? One is obviously the Popov-Lebedev crew of February 1980, when he busted his knee and Ryumin stepped in: another is probably Soyuz-18 backups with Kovalyonok in May 1975; still another could be Soyuz T-4. behind Savinykh, in 1981, si<mark>nce</mark> policy is to rotate a "loser" back into the backup slot one more time. But when and where else?

AVIATION WEEK FORECAST ISSUE... March 12 was the "survey" issue of AW&ST, and they ran a long article on Soviet space activities, much of it derived from Nicholas John-<mark>so</mark>n's third annual <u>Soviet</u> <u>Year</u> in Space report (kudos for Nick!). Says AW&ST, "Several large new Soviet systems should be operational within five years... in a space program buildup as large, if not larger, than the U.S. Apollo effort, with the key elements involving: *A Saturn-5-class launcher designed to place 300,000-400,000-1b. payloads into orbit; *A heavy manned space shuttle development with a vehicle comparable in size to the U.S. shuttle orbiter; *A heavy space station development designed to place as many as a dozen cosmonauts in orbit on the same facility by the end of the decade; *A winged spaceplane development that is expected to be used for light cargo transport and crew replacement activities in connection with the large Soviet station; *A new medium booster development capable of placing about 30,000 lb. in orbit and expected to be teamed with the spaceplane; *Continuous development in the existing Salyut program, including more extensive use of the heavy Salyut station tug equipped with a Gemini-class reentry vehicle for return of materials processed on the station. The Soviets have as many as nine aerospace and heavy machinery design bureaus working on this space buildup." Further, "Ground test activity with the Soviet heavy shuttle and heavy unmanned booster stages is under way, and the new medium booster has been moved to its Tyuratam launch pad for initial fit and function checks prior to first flight." NEXT ISSUE:

Funny Progress-19 profile?
Still no 1443 schematics, photos?
Where are mil-Salyut cosmonauts?

