

Cosmogram-9

1984Apr22

JEO, Rt2 Box 350, Dickinson TX 77539
SALYUT-7 PRESSES ON. Soyuz-11/10 swap and Progress-20 resupply now accomplished, Kizim/Solovyov/Atkov continue their long voyage, headed for what evidently is a record stay in space (on Sep06 will surpass 211 day record).

T-11 launch Apr03/1308
T-11 linkup Apr04/1431
T-10 land April11/1050
T-11 swap sep 13/1027
P-20 launch Apr15/0813
P-20 linkup Apr17/0922

NEXT VISITS? The orbit precesses around again in late May, and again in late July. What kind of new visits can we expect? Can we ever expect to see visiting crews exceed a seven day overlap? Is it conceivable that the current crew could be partially exchanged in the coming months -- say, Solovyov returning to Earth, relieved by a fresh FE such as Serebrov? And are there any reports of other nationalities preparing for guest visits? Afghans? The Finns said no, thanks. Palestinian Arab? Nicaraguan? It is conceivable that some such nationalities could require pre-launch total secrecy. Others, such as Ethiopian, or Syrian, or Greek, or Austrian, or North Korean, or Cambodian, would seem more likely to follow past precedent and be highly publicized for a year or more in advance.

IS IT ALL OVER FOR STREKALOV? Now that Gennadiy has made his third orbital flight, will he be retired? Or will he be allowed to return to the Titov crew, evidently the Soyuz T-10 backups? Since he was a last-minute stand-in, he may NOT have lost any standing in his original crew. Rukavishnikov was removed, say the Soviet papers, because he came down with "the grippie", not because of some congenital defect associated with age. Does this mean he may fly again - a fourth orbital mission?

He has never been aboard a Salyut, remember! And will we see a visiting expedition with Beregovoy and Grechko in a year or two, when Grechko is 53 or 54?

PROTON PHOTO CONTROVERSY. Dispute continues over whether Oct 83 Sputnik really shows part of a Proton launcher. C-gram non-subscribers appear divided on this question, and I have not seen the photo in question. To be continued. ZERO CONTACT WITH INDIAN NEWSMEN. My attempts to get in touch with Indian journalists, who are certain to be having excellent access to Soviet space information, have been complete failures. Not a single response to any inquiry.

HARVARD CONFERENCE ON SOVIET SPACE. On April 9 there was a one-day seminar on Soviet space activities, sponsored by Harvard University in Cambridge, Massachusetts. I talked to several people who went and they were mystified why such a superficial activity was ever conceived. Anybody who knew anything about Soviet space activities reportedly would have learned nothing there.

KOSMOS-1443 CUTAWAY VIEW. Just after remarking that no such views yet had been published, I learned of one in the Feb '84 issue of Sovietskiy Soyuz (Mar '84 issue of the English edition, Soviet Union). It is a pretty good one although still no details of the 'recoverable module'. I am having 35mm slides made of both the cover art and the cutaway section.

SOVIET MILITARY POWER - 1984, from the Pentagon, copies C.P.Vick's artwork of new booster family. Has more photographs from Kosmos-1445 recovery, too. Says: "Since last year, the Soviet developmental programs for providing a family of new space launch vehicles and reusable spacecraft ... have come sharper into focus. Significant new launch and support facilities at Tyuratam are nearing completion. Some of these should be

ready this year or next to support initial testing of new launch vehicles. These vehicles include a space transportation system (STS), that in many respects copies the design of the US space shuttle, a new heavy-lift launch vehicle based on the core rockets of the STS and a new medium-lift launch vehicle that is evidently designed for high launch rates. The new spacecraft include a space shuttle that differs from the US shuttle only in the respect that the main engines are not on the orbiter, a small space plane ... and a space tug that would be used in space to move equipment and supplies from one orbit to another. The Soviet shuttle could be first tested in the mid-to-late 1980s... The new heavy-lift vehicle is estimated to have the capability to place payloads weighing upwards of 330,000 pounds into low earth orbit."

BAUDRY TO MOVE TO HOUSTON. Backup French guest-cosmonaut Patrick Baudry is the leading candidate for a French guest mission aboard the Space Shuttle next March. He will spend about six months in Houston and I expect to talk to him at length. Any new questions to ask? Any advice on topics to avoid, for any reasons?

NEW CHINA LAUNCH SITE. China-14 (Jan29:1225GMT) and China-15 (Apr08:1120GMT) were obviously from a new launch site south of standard space center. Hint: Chinese journalist at launch described liftoff as occurring just past sunset, in an area surrounded by mountains. Pan Hongxin, in a Beijing domestic service report broadcast Apr10/1200, began his report: "The sun is just setting here, white clouds are scattered about in the sky, and the mountains around the site are bathed in the golden glitter cast by the setting sun. The sky is getting dark." For 31N, this would have occurred at 105E, in Sichuan (Szechwan) province somewhat east of

capital, Chengdu. But the launch site would have to be somewhat south of there, since the China-14 groundtrack made first northbound equator crossing at 032.55W, which traces back to a track across China along roughly a line from Kueiyang in Kweichow (much further west would not have been late enough in the day to be consistent with Pan's sunset description) to the seaport of Shant'ou. [My first estimate of location, in a letter dated April 12, was based on misunderstanding an equator crossing as being one rev too early -- I retract my suggestion of "east of Chengdu in Sechuan"]. American visitors in 1979 were shown Long March 3 booster factory near Shanghai. Stages could be barged up the Yangtze River to the site. Chinese journalists also reported that the site was in "southwestern China" and that the launch azimuth of the booster was "to the south east". Launch sequence of China-15 involved SUBORBITAL leg between second stage cutoff and third stage (presumably cryogenic) ignition at first equator crossing. Apogee burn was made after three revolutions in transfer orbit. Stage 3 was left in 12-hour transfer orbit with 31.1 inc. Note that this dusk launch time means that eyewitnesses would have had a spectacular apparition in the sky, as the booster contrails were lit by the over-the-horizon sun to the west. Potential witnesses were in Hong Kong (200 km south of track), Taiwan (between 20 and 400 km north of track), and Luzon (300 km south of track). Anybody hear of any spectacular UFO reports from these regions on January 29 or April 8?

SOYUZ-1/2 CREW SENSATION. Rex Hall found a "Gagarin Jubilee" (50th birthday) article by Valeriy Kubasov, entitled "When Gagarin Was A Stand-by". Rex had the Novosti release (3NT003-84-8402) in English, and Joe Rowe sent me the

original (from Vechernaya Moskva, Mar 9, p. 3) which corrects several obvious typographical errors in the Novosti translation [BUT the Novosti version has several passages cut from the VM version, which were not totally flattering to Gagarin]. Anyway, Kubasov relates that from Aug 1966 to Apr 1967 ("1977" in Novosti) he, together with Viktor Gorbatko and Yuri Gagarin, were training "together" to fly the Soyuz. Gagarin was "head of our team". This of course is at odds with the official Soviet account that Gagarin was backup to Komarov, not to a three-man crew (and of course Kubasov and Gorbatko later were backups to Yeliseyev and Khrunov, during Soyuz-4/5). Yet I am willing to accept the new report as accurate in describing the backup crew of Soyuz-2 (prime crew Bykovskiy, Yeliseyev, Khrunov), and then ask, "Who was Komarov's backup on Soyuz-1? It has been said in Moscow that "Lazarev trained together with Komarov for Soyuz-1". Moskovskaya Pravda (Mar 3, p.3) wrote that during Soyuz-1, Gorbatko had already been training for the flight "more than two years". Gagarin's widow's book "108 Minutes and a Life" recounts that Gagarin was enraged to learn that the "Soyuz-1" teams (prime and backup) had already been composed without him, and he had to raise hell with officials to get himself added later. If the first assignments had been made early in 1965, they could therefore not have included the four men assigned to "Voskhod-3", to wit, Volynov, Shonin, Beregovoy, and Shatalov. So, again the question, who was really Komarov's backup? And who did Gagarin bump from the command of the Soyuz-2 backup crew? The available commanders, in the order they later flew, are: Filipchenko, Nikolayev, Dobrovolskiy, Lazarev, Popovich, Gubarev, Leonov ... and not to forget "Dmitriy". So, new grounds for specu-

lation.

DMITRIY AGAIN? Rex Hall sent me another photograph, from a Ukrainian book on cosmonauts ("Voni bili pervimi" -- in Russian, "Oni byli pervimi", "They were the first ones"). With Kamannin on the grass sit three pairs of cosmonauts: Shonin and Kubasov, Nikolayev and Sevastyanov, and ??? and Volkov. The "???" is probably "Dmitriy" and he does in fact look like a man in some of our earlier mystery photos. Photo must have been taken post Soyuz-4/5; the Nik/Sev crew was known to have been in training in late 1968 because they clearly show up in Soviet Soyuz-3 film, "Man and Cosmos". Also in that film, another two-man crew showed what many observers later identified as Volkov and an unknown pilot ... Dmitriy again?

April 5 ANOMALY. Another tidbit of fallout from the Gagarin Jubilee is in the table at the back of the Mar 1984 issue of Astronomy/Cosmonautics, on manned mission durations. It lists the April 5, 1975 Soyuz launch abort, and gives a flight time of "22 minutes". This seems reasonable -- but I have never seen this flight listed in previous Soviet books tables, and it is not counted as a "space flight" in the running totals of cosmonaut activity. It only took nine years to release this item!

OLD COSMONAUT. What is this report that as of 1982 there was a cosmonaut "in his mid-fifties" being trained for a flight?? Any new whispers on this?

FATE OF MILITARY COSMONAUTS. During Gagarin Jubilee, photos showed Yuriy's mother with younger cosmonauts. Lyakhov, Romanenko, Klimuk had chestful of service ribbons (six or seven rows, four to a row!!); Zudov and Sarafanov had only two rows! So what have they been doing since 1977? I last heard of Rozhdestvenskiy as a CAPCOM for Salyut-6 in 1979, no mention since. Glazkov still ap-

pears in group photographs. The way these men have been side-tracked is a mystery to me.

SOVIET SPACE SUPPORT SHIPS. During congressional testimony in mid-March, Rear Adm. John L. Butts, director of naval intelligence, disclosed that the construction of the first of a "Marshall Nedelin class" of space support ships was completed in 1983, and that "a second apparent space event support ship" also was launched; the latter is more than 850 feet long and probably is nuclear powered, and this size "indicates that the navy's role in the Soviet space program is increasing."

WHEN DID EX-COSMONAUT 'VALENTIN GRAMPS' DIE? Shonin's book had identified a cosmonaut-candidate named Valentin who was too old (mid-30s?) for the rigor of training, and who dropped out of the program, to the sorrow of the younger men who had nicknamed him "gramps" ("d'yed"). Soviet sources recently wrote that he later took part in the training for the *Voskhod* spacewalk, as a training official. My files also have this brief note: "Moscow, Oct 6, 1970 UPI. A Soviet test pilot who helped develop techniques for the world's first spacewalk was killed while testing a new supersonic catapult system, Pravda said today. Lt. Col. Valentin I. Danilovich ejected at high altitude from an aircraft flying at supersonic speed, Pravda said..." Well, Valentin was a common name (there were three such candidates among the twenty first cosmonaut-selectees), but all the same it is suggestive.

LIBRARY OF CONGRESS REPORT: A note from Marcia Smith of the Congressional Research Service, "We have completed Part 2 of the SOVIET SPACE PROGRAMS 1976-1980 update covering manned programs and the space life sciences, but have been advised that it will be many months before the government

printing office publishes it. Consequently we have assembled a CRS report, "ATTAINING A PERMANENT MANNED PRESENCE IN SPACE" for use on an interim basis. The report consists of the executive summary, overview, and 1981-1983 supplement that will appear in the GPO-published version." Let me add that however useful these reports are, the decision to omit time-of-day from the launch summary table, and the continued absence of an index, makes them much less valuable for my own particular needs. However, better than nothing by a long shot -- thanks, CRS!! I'm not sure how to advise overseas friends to obtain copies, since in the USA one is supposed to ask one's congressman.

"COSMONAUTS AND COSMONAUTICS" is an occasional publication in Australia (Number 1 came out in Feb 1983). It looks terrific since it draws upon a wide assortment of Soviet sources, as well as my own material and BIS too! Subtitled "Soviet Space Activities: Review, Analysis, Speculation". Editor, Mark S. Hillyer, P.O. Box 229, Noble Park, Victoria, Australia. Mark asks (Feb12), "Is there anything to connect Ryumin with Soyuz-22? [not to my knowledge]" and "Have you seen anything that suggests Kovalyonok and Savinykh were originally the Soyuz T-4 backup crew? [No]". Anybody else can help? ASTRO INFO SERVICE has been brought to my attention by Mr. Anne van den Berg. Address, 26 High Farm Road, Hurst Green, Halesowen, West Midlands B62 9RX, England. They reportedly publish MSF NEWS [Manned Space Flight] and a "SPACE EXPLORER'S LEXICON". Well-known names attached to the project are David Shayler, Rex Hall, Neville Kidger, the same vdB, Curtis Peebles, Rick Mulheirn, and vdB's associate Gerard van de Haar. Good luck!

Jim Oberg