[redacted] ~~SECRET~~

DTR

DECLASSIFIED UNDER AUTHORITY OF THE
INTERAGENCY SECURITY CLASSIFICATION APPEALS PANEL,
E.O. 13526, SECTION 5.3(b)(3)

ISCAP APPEAL NO. 2009-068, document no. 200
DECLASSIFICATION DATE: May 14, 2015

[redacted]

K410.607-351

NORTH AMERICAN AIR DEFENSE COMMAND

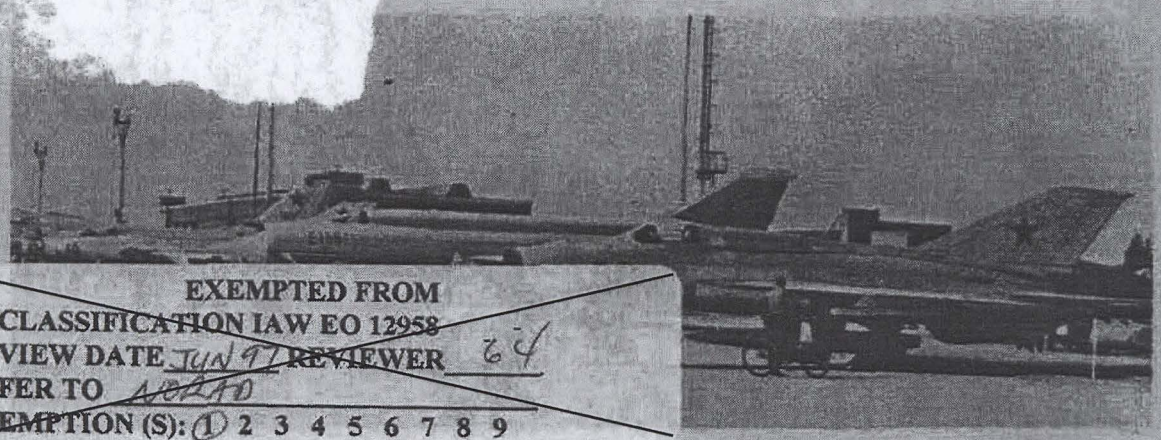
WIR

WEEKLY INTELLIGENCE REVIEW (U)

SCANNED BY ACD

PRIVILEGED INFORMATION

SEE INSIDE COVER FOR SAFEGUARDING GUIDE



00880815

~~EXEMPTED FROM
DECLASSIFICATION IAW EO 12958
REVIEW DATE JUN 97 REVIEWER 64
REFER TO NORAD
EXEMPTION (S): 1 2 3 4 5 6 7 8 9~~

RAND LIBRARY

RE[redacted]OV 7, 1967 [redacted]

MICROFILMED BY ADM

K-237
#44-67
3 Nov. 1967
C.1

[redacted]

SPECIAL HANDLING REQUIRED
This document is releasable only
to U.S. and Canadian Nationals

~~EXCLUDED FROM AUTOMATIC
REGRADING, DOD DIRECTIVE 5200.10
DOES NOT APPLY~~

WIR 44/67
3 Nov 67

~~SECRET~~

NOV -6 1967
Postal Registry No. 261811

[redacted]

SECRET

NORAD Weekly Intelligence Review

Issue No. 44/67, 3 November 1967

RETURN TO COSAFRC WPAFB, OHIO 45433 AFB 112-657

K 410.607-351

The WIR in Brief

COSMOS 189 MISSION UNKNOWN, MAY BE MILITARY 15
No telemetry intercepted.

UNMANNED DOCKING OF 2 COSMOSES A HIGHLY SOPHISTICATED FEAT 16
Required very precise launch of second craft.

Portion identified as non-responsive to the appeal

Portion identified as non-responsive to the appeal

COVER: 8-9 Jul 67 air show scene (from Aviation Week & Space Technology) (OFFICIAL USE ONLY)

NOTE: Pages 26, 28, 29, 32, 33, 36, 37, 40, 41, 44, 45, 48, and 49 of this issue are blank.

Space

COSMOS LAUNCHER DISPLAYED; 1st STAGE IS SANDAL MRBM, AS ESTIMATED 13
Shown at Moscow exposition.

ORBITAL BOMB SYSTEM REGISTERS 7th CONSECUTIVE SUCCESS; NAMED COSMOS 187 13

[redacted]

COSMOS 184 PROBABLY A WEATHER SATELLITE BUT MALFUNCTIONS 1[redacted]
Launch announced 2.5 days late.

COSMOS 185 BELIEVED TO HAVE TESTED MANEUVERABLE UPPER STAGE 15
Launched by SS-9 ICBM.

MICROFILMED BY ADM

00880815

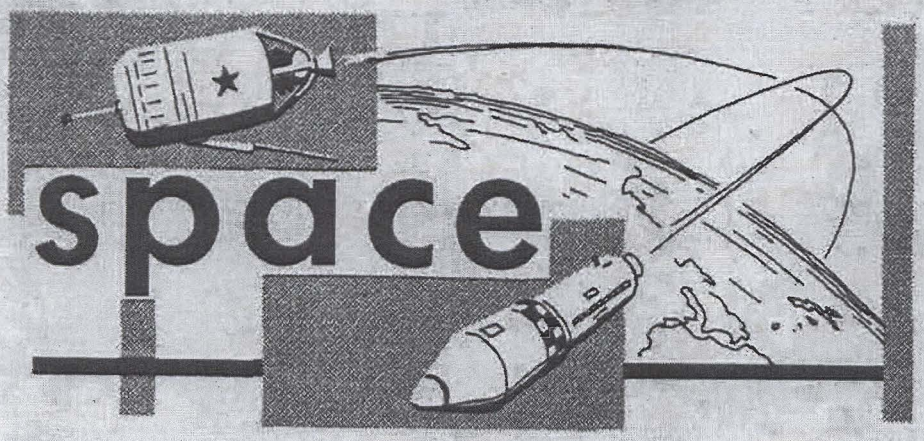
NOTE:

Page 48 of last week's WIR -- the last [redacted] -- was erroneously numbered 50.

[redacted]

50X1 and 3, E.O.13526

SECRET



significant intelligence on space developments and trends

Cosmos Launcher Displayed; 1st Stage is SANDAL MRBM, as Estimated

The Soviets have put on display in Moscow a 2-stage tandem rocket which they say is the launcher of the Cosmos spacecraft. Photography (page 47), indicates that the first stage is the SANDAL/SS-4 MRBM (less warhead), which has been paraded in all the Moscow missile parades since its introduction in the 7 November 1960 parade.

The displayed rocket is probably the SL-7 propulsion system, which the Soviets have been using since 1962 for the launch of research satellites of the Cosmos series from Kapustin Yar. The SL-7's low-orbit payload capability is estimated at about 400 pounds.
(DIA; NORAD)
~~(SECRET)~~

Orbital Bomb System Registers 7th Consecutive Success; Named Cosmos 187

The Soviets' OB-1 orbital bombardment system registered its apparent 7th consecutive firing success on 28 October. It was launched from Tyuratam at about 1315Z and impacted in the USSR about 1.5 hours later, on Revolution 1, near a down-range station of the Kapustin Yar missile test range.

Its orbital parameters were much the same as those of its predecessors -- it was in a very low orbit with an Equatorial inclination of about 49.6 degrees.

Also like its predecessors, it was given a Cosmos designation (No. 187) to conceal its true mission.

The last such test, which occurred on 18 October, was described in last week's WIR. (For all firings, see page 46.)

50X1 and 3, E.O.13526

(NORAD)
~~(SECRET)~~

Cosmos 184 Probably a Weather Satellite but Malfunctions

The Soviets launched Cosmos 184 from Plesetsk at about 2250Z, 24 October, into a near-circular orbit with an inclination of over 81 degrees. This craft is believed to have been intended as a weather satellite:

- Its orbital parameters are those expected of a weather satellite -- nearly the same as those of the last two Soviet weather satellites -- Cosmoses 144 and 156.
- The Soviets need to launch one or more meteoroglogical satellites at this time, since those previously launched apparently are no longer functioning properly. The USSR has not transmitted any data from them to the US over the "hot line" since mid-September.

Cosmos 184 apparently failed to function properly, however. The Soviets did not announce its launch until about 2.5 days later; at that time, they named the vehicle Cosmos 184 and said that it was carrying scientific instrumentation for space research. Successful satellites are usually announced within four hours after launch.

This failure of Cosmos 184 will prevent the Soviets from resuming their transmissions of satellite-collected weather data to the US.

Actually, the Soviets have never fully met the terms of their 1962 agreement with the U.S. Their first successful weather satellite was not launched until June 1966, one year after the exchange of weather data from satellites was to begin. And then Moscow did not send any data from this vehicle (Cosmos 122) until two months after launch, in September 1966. Finally, the usefulness of the data passed has been of limited value in weather prognoses, because the Soviets have failed to transmit the data within the 6-hour time limit specified in the agreement.

Another attempt to launch a weather satellite is expected in the near future.
(NORAD; CIA)
~~(SECRET)~~

Cosmos 185 Believed to Have Tested a Maneuverable Upper Stage

50X1 and 3, E.O.13526

Cosmos 185, which the Soviets launched from Tyuratam at about 0220Z, 27 October, is believed to have been intended as a test of the maneuverability in orbit of an upper stage. [redacted]

An important difference, however, between Cosmos 185 and Cosmoses 102 and 125 is that the former was launched by an SS-9 ICBM, the latter by the SL-3 space launch system (SS-6 ICBM, Lunik third stage, and a new fourth stage). This is the first time that the SS-9 has been used to launch a spacecraft other than the re-entry vehicles of the OB-1 orbital bombardment system. This launch may indicate that the SS-9 will take over some of the functions previously performed by the SL-3, the workhorse of the Soviet space program. (NORAD)
~~(SECRET)~~

Cosmos 189 Mission Unknown, May Be Military

50X1 and 3, E.O.13526

The mission of Cosmos 189, which the Soviets launched from Plesetsk at about 1758Z, 31 October, is not known. TASS said that it was a regular Cosmos-series research satellite, but it is suspected of having some unknown military application. [redacted] In this respect it resembles Cosmos 158, which was launched on 15 May 1967. Both vehicles were launched from Plesetsk by the SL-8, a 2-stage propulsion system consisting of the SS-5 IRBM and a restartable upper stage. There were differences in the initial orbital parameters of the two vehicles, but the differences were not so great that the two spacecraft could not have been executing the same mission:

	Cosmos 189	Cosmos 158
Inclination	74 degrees	74 degrees
Period	95.7 minutes	100.3 minutes
Apogee	600 km (323 n.m.)	810 km (436 n.m.)
Perigee	535 km (287 n.m.)	738 km (396 n.m.)

It is possible that the lower orbit for Cosmos 189 was dictated by experience gained from the Cosmos 158 flight.
(NORAD)
~~(SECRET)~~

Unmanned Docking of 2 Cosmoses a Highly Sophisticated Feat

NORAD is unable, on the basis of RADINT, to confirm or deny TASS's claim that two unmanned Soviet spacecraft, Cosmoses 186 and 188, performed an automatic docking in space on 30 October before the second of the two vehicles had completed one orbit. RADINT indicates, however, that the Soviet claim could easily be true, since the two vehicles were very close at the times indicated.

TASS said that the docking occurred at 0920Z and that the two ships separated at 1250Z, when they were put into separate orbits. Radar tracking confirms the time of separation and indicates that Cosmos 186 was boosted into a slightly higher orbit.

Accomplishment of an unmanned docking before the second vehicle had completed one orbit would be a substantial technical feat: it would require launch of the second craft into a highly precise coplanar orbit; this, in turn, would call for precise timing of the launch. A very sophisticated on-board computer (or computers) would be required to process data from on-board optical or electronic scanners and to direct operation of the maneuver thrusters.

Both craft were launched from Tyuratam -- Cosmos 186 at about 0930Z, 27 October, Cosmos 188 at about 0814Z, 30 October -- into orbits with Equatorial inclinations of about 52 degrees. Both were orbited by the SL-4 propulsion system, which consists of the SS-6 ICBM and the heavy Venik upper stage.

Cosmos 186 was de-orbited during the early part of Revolution 64 on 31 October, after about 4 days in orbit. Cosmos 188 presumably also will be de-orbited shortly.

Both craft were of the same type as Soyuz 1, in which Cosmonaut Komarov met his death on 24 April, judging by similarities in radar signatures, propulsion systems, [redacted] and orbital parameters. TASS, of course, did not say that they were of the same type; instead, the two craft were given Cosmos designations.

This reported docking operation tends to support Western estimates that Soyuz 1's mission was to dock with another vehicle, but the operation was called off when Soyuz 1 systems did not function properly. (The Russian word Soyuz means "union.")

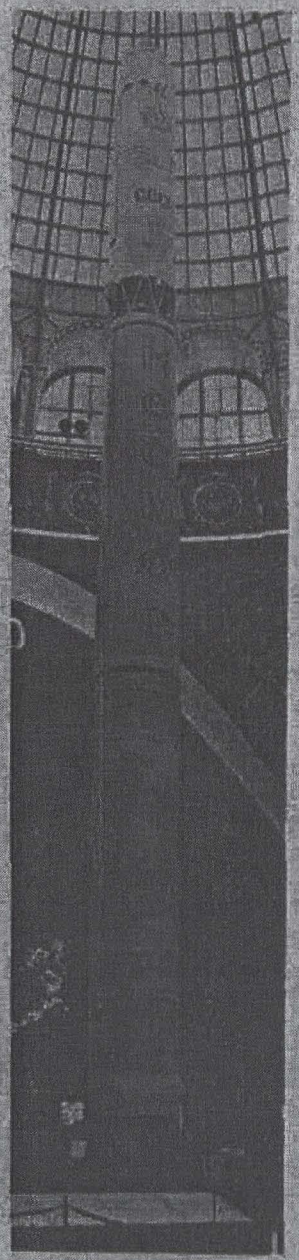
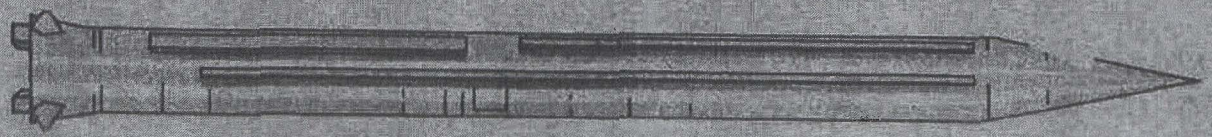
The Cosmos 186/188 operation, therefore, probably was a checkout of new or improved systems or components for Soyuz-type spacecraft. It might also be a precursor of coming Soviet manned flights, although Mstislav Keldysh, President of the Soviet Academy of Sciences, has said that there will be no manned space events launched before the 7 November celebrations. The next Soviet manned flights, whether they occur before or after 7 November, will probably involve crew transfer. The operation

50X1 and 3, E.O.13526

might involve one Soyuz-type craft and one very heavy spacecraft, launched by the SL-12 propulsion system (SL-9 plus an upper stage). The SL-9 launched the 12.2-metric-ton Proton payloads. (NORAD)
~~(SECRET)~~

SL-7 Space Launcher
(2 photos joined)

~~CONFIDENTIAL~~

ZOBKAD
WIR 44/67
3 Nov 1967

SANDAL/SS-4 MRBM