



EXEMPTED FROM
DECLASSIFICATION LAW EO 12958
REVIEW DATE 1997 REVIEWER 69
REFER TO NORAD
EXEMPTION (S): 1 2 3 4 5 6 7 8 9

UNCLASSIFIED

~~SECRET~~

NORTH AMERICAN AIR DEFENSE COMMAND

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. 208
DECLASSIFICATION DATE: May 14, 2015

K410.607-364

WEEKLY INTELLIGENCE REVIEW (U)

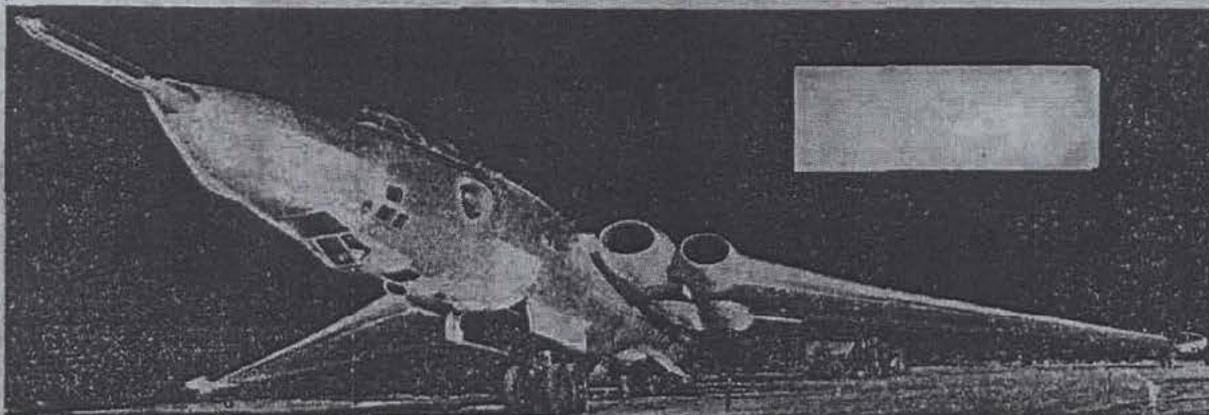
RAND LIBRARY

REC'D. MAR 5 - 1968

DOWNGRADED TO UNCLASSIFIED FOR
PUBLIC RELEASE BY
NORAD/USNORTHCOM/CSO
SEPTEMBER 2009

SCANNED BY ACD

2009



00880828

UNCLASSIFIED PRIVILEGED INFORMATION

SEE INSIDE COVER FOR SAFEGUARDING GUIDE

FOR OFFICIAL USE ONLY

~~SECRET~~

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 9/68
1 Mar 68

9/68
1 Mar 1968
C.1

MAR 4 - 1968

Postal Registry No. 267809

REPRODUCTION BY JCR

NORAD-ADC Field Printing Plant
Fort AFB, Colorado

UNCLASSIFIED

NORAD

Weekly
Intelligence
Review

RETURNS
U.S. AIR
MAIL
36112-6670

K410.607-364

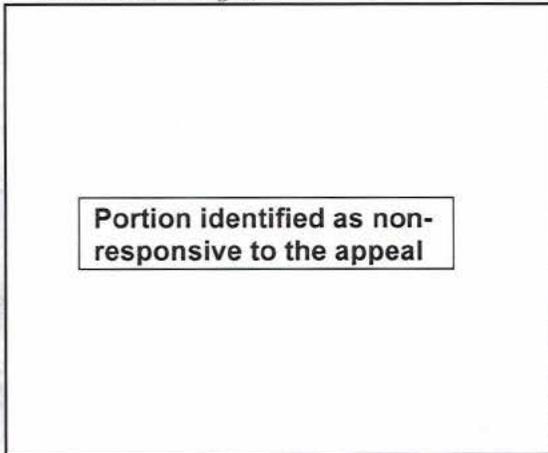
Issue No. 9/68, 1 March 1968

The WIR in Brief

Communist Military Capabilities

UNIDENTIFIED VEHICLE LAUNCHED FROM
PLESETSK FAILS; A NEW OR MODIFIED
WEAPON SYSTEM
Has at least 2 stages.

2



Portion identified as non-responsive to the appeal

2

3

3

4

5

5

Portion identified as non-responsive to the appeal

19

21

22

23

24

25

25

Space

LUNAR PROBE ATTEMPT MAY COME IN EARLY
MARCH

8

Much like 7 Feb 68 attempt.

DEFECTOR CONFIRMS USE OF FOLDED-LIGHT-
PATH OPTICS FOR SOVIET PHOTORECCE
SATELLITES

8

Their use had been anticipated.

COSMOS 202 MISSION NOT CLEAR

9

May study radiowave propagation and/or test
spacecraft components.

COSMOS 203 PROBABLY A NAVAJD-TYPE
SATELLITE

10

Transmissions are like predecessors.

CORRECTION

10

Cosmos 201 Deorbited 14 Feb not 1 Feb.

SOVIETS PROPOSE JOINT U.S.-U.S.S.R. GEODETIC
STUDIES WHICH WOULD HELP U.S.S.R. BUT
NOT U.S.

11

Would be redundant for US.

RESTARTABLE UPPER STAGE OF COSMOSES 198
and 185 PROBABLY INTENDED FOR MILITARY
MISSIONS

11

Launched by SS-9 ICBM.

COVER: BISON 4-jet heavy bomber (from
Red Star) (OFFICIAL USE ONLY)

NOTE: Pages 30, 32, 33, 36 and 37 of this
issue are blank.

50X1 and 3, E.O.13526

00880828

UNCLASSIFIED

FOR OFFICIAL USE ONLY

-1-

~~SECRET~~

REPRODUCED BY ADRG

~~SECRET~~

COMMUNIST MILITARY CAPABILITIES



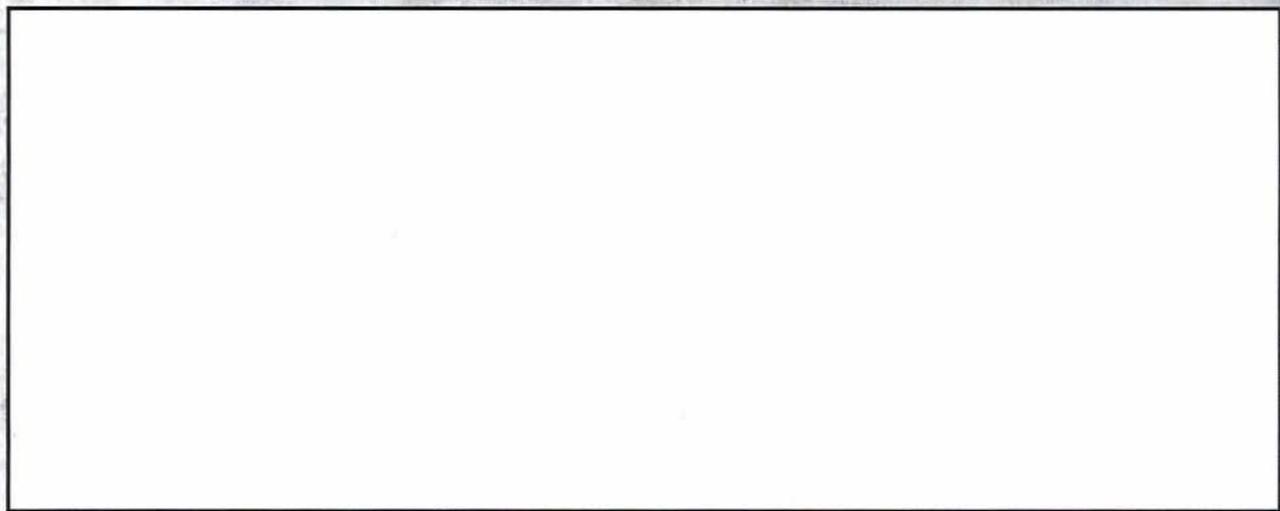
current
developments
and trends in
the armed forces
of the
Communist World

Unidentified Vehicle Launched from Plesetsk Fails; a New or Modified Weapon System

The Soviets launched a new or modified vehicle of unidentified type from the Plesetsk Missile and Space complex on 12 February. The test failed shortly before second-stage burnout when an imbalance in the fuel and oxidizer residual volumes resulted in premature fuel depletion.

Preliminary analysis of [redacted] indicates that:

50X1 and 3, E.O.13526



If this was a new system, it is the first to have its initial launch at Plesetsk.

(DIA)

~~(SECRET)~~

Portion identified as non-responsive to the appeal

~~SECRET~~

~~SECRET~~



significant
intelligence
on space
developments
and trends

Lunar Probe Attempt May Come in Early March

The Soviets may launch a lunar probe about 5 March. A similar attempt on 7 February 1968 failed because of booster malfunction.

It is not known whether the expected craft will be a lunar lander or a lunar orbiter. The greater likelihood is that it will be a lunar orbiter, tasked to collect high-resolution video of the areas where the Soviets two lunar landers, Luna 9 and Luna 13, came to rest on the Moon in 1966. The Soviets apparently have a special interest in this area, which may be a favored site for their first manned lunar landing. Lunar photography published by the US would be of little help to them because the US's lunar orbiters did not obtain high-resolution photography of this particular area.

The expected March launch would not be related to the Soviets' abortive 22 November 1967 attempt to send an unmanned spacecraft around the moon and recover it on the Earth, using the SL-12 propulsion system. None of the vast preparatory deployment of ships noted for the 22 November launch has been in evidence. The forthcoming launch would be more similar in mission and propulsion to the 7 February 1968 launch.

(NORAD)

~~(SECRET)~~

Defector Confirms Use of Folded-Light-Path Optics for Soviet Photorecce Satellites

A defector reports that the cameras aboard Soviet photoreconnaissance satellites "use many mirrors" to shorten the physical length of the long-focal-length lens system. His statement implies the use of folded-light-path optics to obtain the long focal lengths needed for the lens resolution required in photography by satellites, without increasing the physical size of the camera. This technique is in common use for obtaining high-resolution imagery with a compact telescopic system. It had been postulated that the Soviets were using such a system.

-8-

~~SECRET~~



The defector said, however, that he was "disappointed in the alleged improvement in the construction of the telephoto lens, with regard to its length, because the new equipment was contained in a structure of considerable size."

The main cameras on the Cosmos vehicles which the intelligence community assesses as "high-resolution photorecce satellites" are believed to have a resolving capability of 5-8 feet from an altitude (distance) of about 120 n.m. This would require a lens focal length on the order of 1500 mm (4 feet, 11 inches). However, the large size of the camera unit about which the defector complained could be attributed to the packaging of several cameras in one payload unit. Soviet high-resolution photorecce satellites are believed to carry at least two prime cameras for the sensor system, plus one indexing and two horizon-sensing cameras.

(FTD)

~~(SECRET)~~

Cosmos 202 Mission Not Clear; [redacted]

The Soviets launched Cosmos 202 from Kapustin Yar (KY) at about 1003Z, 20 February, using the SL-7 launch system with a possibly modified second stage. Orbital parameters have been reported as follows:

Inclination	48.4 degrees
Period	91.4 minutes
Apogee	272 n. m.
Perigee	116 n. m.
Life expectancy	Less than 1 month

50X1 and 3, E.O.13526

[redacted] these did not begin

The mission of this satellite has not been identified. However, the [redacted] one of its missions may be a research experiment in radio-wave propagation which may be directly related to the test and/or development of a navigation satellite system. The [redacted] [redacted] have been characteristic of developmental navigation-aid satellites (see next WIR item).

Another possible mission is flight test of subsystems or components which are to be used in future Soviet spacecraft. In this connection, it may be relevant that Cosmos 202 is similar in certain respects to Cosmos 149 which, according to the Soviet press, tested various spacecraft components. (WIR 16/67). Both these Cosmoses were launched from KY by the SL-7 propulsion system at about the same time of day (1007Z for Cosmos 149, 1003Z for Cosmos 202); both had relatively low perigees and comparatively short orbital life expectancies.

(NORAD)

~~(SECRET)~~

50X1 and 3, E.O.13526





Cosmos 203 Probably a Navaid-Type Satellite

Cosmos 203, which the Soviets launched from the Plesetsk space and missile complex at about 1600Z, 20 February, is believed to be a developmental navigation-aid type satellite.

NORAD Space Defense Center has reported its orbital parameters as follows:

Inclination to the Equator	74.02 degrees
Period	109.1 minutes
Apogee	1203 km (649 n. m.)
Perigee	1165 km (629 n. m.)

Four other Cosmoses launched in recent months are believed to have been developmental navigation-aid satellites:

- Cosmos 158, launched 15 May 1967
- Cosmos 189, launched 30 October 1967
- Cosmos 192, launched 23 November 1967
- Cosmos 200, launched 19 January 1968

All were launched from Plesetsk by the SL-8 propulsion system, which consists of the SS-5 IRBM booster and a restartable upper stage, and all have relatively circular orbits of about 74-degree inclinations.

[Redacted]

used by previously launched Soviet navaid satellites -- and is carrying an S-band beacon.

Cosmos 203's orbit is about 200 n. m. higher than any of the others, providing better coverage and avoiding near-Earth orbit perturbations which are encountered at lower altitudes. It appears that the navaid-satellite program is still in the developmental stage and that the Soviets are experimenting with various orbital altitudes in an effort to optimize the system's operational characteristics.

(NORAD; FTD)

~~(SECRET)~~

50X1 and 3, E.O.13526

Correction

Cosmos 201 Deorbited

14 February

Cosmos 201, Soviet photoreconnaissance satellite, was de-orbited 14 February, not 1 February, as inadvertently stated on p. 12, WIR 7/68.

(NORAD)

~~(SECRET)~~





Soviets Propose Joint Us-USSR Geodetic Studies Which Would Help USSR But Not the US

Soviet astronomer Dmitriy Shchegolev recently visited the US to propose joint US-USSR observations of US geodetic satellites.

Such an exchange would strongly benefit the USSR, while giving the US essentially redundant data. Geodetic data of the type which could be gained from the proposed joint observations would enable the Soviets to verify and improve geodetic ties already in existence. The Soviets have steadily sought to reduce the uncertainties in North American geodetic data available to them. Accurate data of this type is required for precise mapping and missile targeting. The Soviets seek US geodetic data because they do not have a worldwide optical tracking network of adequate quality, despite their claims to the contrary.

Shchegolev, during his discussions in the US, said that the Soviets have installed at Riga a prototype of a camera which has been ordered for all Soviet satellite-tracking facilities. He claimed for the prototype an operating mechanism better than that of the US's Baker-Nunn camera and an equal tracking capability, but with some limitations in aperture. For years the Soviets have been trying to build a camera which can track faint satellites, but they have not been able to match the sensitivity of the Baker-Nunn. There is no indication that the Riga camera has solved their problem.

(CIA)

~~(SECRET)~~

Restartable Upper Stage of Cosmoses 198 and 185 Probably Intended for Military Missions

An upper stage which restarted in space several times to change the orbital parameters of Cosmoses 198 and 185 may be intended for use in military spacecraft of the future, such as:

- A coplanar interceptor satellite (one launched into an orbit in the same plane as its target satellite) which would inspect and/or prevent mission accomplishment by a foreign target satellite, particularly one suspected of having a military mission.
- A multiple-orbit bombardment system (MOBS).
- A second-generation military reconnaissance system.

Cosmos 185 was launched from Tyuratam on 27 August 1967 into a ballistic trajectory of 7200 n. m. range. When the payload reached its ballistic apogee of 232 n. m., it was injected into a low, eccentric Earth orbit by a restartable upper stage, [redacted]

[redacted] The new orbit had an apogee of 482 n. m. and a perigee of 280 n. m. [redacted]

50X1 and 3, E.O.13526





50XI and 3, E.O.13526

Cosmos 198 was launched from Tyuratam on 27 December 1967, exactly two months after Cosmos 185, into a ballistic trajectory of 10,000 n.m. range. At the apogee (145 n.m.) of its ballistic trajectory, it was injected into an almost-circular Earth orbit with an average altitude of 145 n.m. . On Revolution 13, the payload was reinjected into a circular orbit with an average altitude of 500 n.m.

Neither Cosmos 198 nor Cosmos 185 made any changes of orbital plane. [redacted]

A military mission for this restartable upper stage is suggested by the fact that Cosmoes 198 and 185 were launched by the SS-9 ICBM, which the Soviets have used to date only as an ICEM and as the launch vehicle for their FOBS (fractional-orbit bombardment system). The SS-9 is the Soviets' largest true military booster. It would thus appear that this program, using military resources, is under complete military control.

The Soviets are also developing restartable upper staging for non-military space missions, but this effort has been quite distinct from the military program. All the spacecraft associated with restartable upper staging for nonmilitary space tasks have been launched by the SS-6 booster/sustainer.

(NORAD)
~~(SECRET)~~

