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NORTH AMERICAN AIR DEFENSE COMMAND

W O R

WEEKLY INTELLIGENCE REVIEW (U)

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Special Index Issue, 1 Jan 1970

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contents

U. S. S. R.	2
Military, political, economic, and foreign affairs; science and technology. (see 3d section, below, for space items)	
NATIONS & AREAS Other than USSR	5
Orientations and capabilities.	
Space (refers to USSR unless otherwise stated)	8
Shop Talk	9
Intelligence functions, including publications, security.	
Illustrations	19
Photos, drawings, maps, charts. A separate listing for those who use WIR translucencies to make briefing aids.	

FOREWORD

This special index issue is published as an aid in researching information which has appeared in the WIR during the last six months of 1969.

The number shown after each item is the issue number of the WIR in which the item appeared.

Items are listed chronologically by title, according to the order of their appearance in the WIR, under appropriate headings.

An attempt has been made to list each item under all pertinent headings or to make suitable cross-references.

Titles may sometimes appear to be listed under inappropriate headings. This occurs because titles often do not -- because they can not -- cover all information included in the item.

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REPRODUCTION BY PERM



USSR

Aerospace Defense (Miscellaneous)

Radar for self-propelled AA weapons may provide 3-dimensional target data (33/69)

Soviet AWAC aircraft MOSS believed operational (47/69)

Agriculture

Weather will keep this year's Soviet grain output well below last year's near record (38/69)

Agricultural prospects mixed this year (U) (41/69)

Airborne Electronics

Airborne laser experiment conducted in 1966: military potential seen (34/69)

New airborne J-band emitter may be on recce version of MiG-21 (34/69)

Modified MUSHROOM bomb/navigation radar has better detection capability (36/69)

New transistor-type pulse trigger could be useful in airborne, other compact radars (38/69)

Possible new type AI radar introduced into East Germany (46/69)

Tail-defense radar on BLINDER designated FAN TAIL (49/69)

Aircraft (General)

Technological gap between USSR and West large in many areas, may be growing (28/69)

Soviets apparently used TFE back-up rings in hydraulic systems long before US did (32/69)

Flashing lights observed in bomb bay of amphib which overflow US destroyers (40/69)

Soviet AWAC aircraft MOSS believed operational (47/69)

Soviet SSTs will probably use kerosene-type fuels (47/69)

Jet fuel quality being upgraded to meet needs of Mach 2-Mach 3 aircraft (47/69)

Air-to-Air Missiles (AAMs)

ANAB, ASH AAMs believed highly maneuverable, suitable for long-range, high-speed encounters (29/69)

New version of ANAB AAM has both IR and radar fuzing (43/69)

Antiballistic Missiles (ABMs) -- see Ballistic Missile Defenses (BMD)

Armed Forces

Military-patriotic writings on decline in USSR, some of it distorted, says newspaper (U) (27/69)

Communication or field exercise may be held in western USSR (31/69)

Soviet military manpower expanded during 1960s (32/69)

Indicators of impending Warsaw Pact activity noted (33/69)

New uniforms set for Soviet forces (U) (34/69)

Skirmish in war of nerves between Chinese, Soviet border guards described in radiocast (U) (36/69)

Personnel problems in Soviet armed forces, military press hints (37/69)

Preparations for 7 Nov. Moscow parade under way (42/69)

Automated command and control system tested in exercise (U) (43/69)

Current capabilities of the Trans-Siberian railroad reviewed (44/69)

Preinduction military training, vital under new draft law, said to be inadequate (U) (46/69)

Area of USSR opposite China's Sinkiang Province named separate military district (47/69)

Soviet forces in Germany get new CINC (48/69)

Ballistic Missile Defense (BMD)

TRY ADD a precise ABM target tracker; may use monopulse (34/69)

Game theory on evasive action by offensive missile still being studied (36/69)

High priority of shock-loading studies, applicable to ABMs, indicated by use of nuclear shots (37/69)

2 ABMs apparently launched against changed target missile (37/69)

Soviets still eye ionosphere as lens: has antimissile, communications potential (41/69)

Newly detected ABM/space radar nicknamed BIG SCREEN (50/69)

Possible over-the-horizon radar signals from USSR detected during Apollo 12 launch (50/69)

2 ABMs fired in 29 November test (51/69)

Soviets competent in studies of radiation damage to nonsemiconducting electronic materials (51/69)

Biological Warfare (BW)

Soviets adopting Western techniques for virus research; BW implications seen (31/69)

Bombers

BLINDER photo presented (U) (41/69)

USSR testing new bomber (44/69)

BADGER which carries KELTS ASM given "G" model designation (45/69)

Tail-defense radar on BLINDER designated FAN TAIL (49/69)

Chemical Warfare (CW)

CW a major part of Soviet training in weapons of mass destruction (40/69)

New Soviet CW decontamination unit uses turbojet engine (41/69)

New concept for rapid detection of nerve agents may be considered (45/69)

Civil Air (also see Transport Aircraft)

Civil aviation growing by leaps and bounds, Soviet paper claims (U) (36/69)

Civil Defense

Civil defense envisions evacuation of cities; measures worked out in detail (U) (48/69)

Communications (also see Comsats and Space Communications in "Space" section)

Tropo comm net could serve LRA staging bases, EW net; mobile tactical tropo has been deployed (27/69)

Satellite, submarine cable figure increasingly in global communications; Soviet participation minor (U) (31/69)

Study possibly relating to secure communications, multiple access to comsats, published (42/69)

Computers

Soviets seek foreign computers to exploit their accelerators, including world's most powerful (30/69)

Best Soviet papers on computers not presented at conferences because of security (35/69)

Computers may help in near real-time processing of photos from recon aircraft, spacecraft (41/69)

Soviets buy extensive support with Western computer to avoid pitfalls of previous purchase (49/69)

Dirigibles

D-1 dirigible may be built soon (U) (30/69)

Economic Affairs (also see Agriculture)

Soviets expand auto industry, but car ownership on Western scale still far off (U) (29/69)

Managerial system mainly to blame for Soviet technological lag (32/69)

Soviet economy still growing but growth slowed down in 1st half of 1969 (23/69)

Plan to bring automobile age to Soviet public progressing, but slowly (34/69)

Western tourists increasingly important to hard currency earnings of USSR, Eastern Europe (35/69)

Soviet industrial productivity poor in comparison with US's, says Soviet economist (U) (37/69)

Soviet economic reform loses momentum (37/69)

Economic reforms not getting desired or even reported results, says Soviet economist (38/69)

Soviet TV expanding; qualitative lag as bad as quantitative lag (39/69)

USSR seeks to expand heavy truck production (44/69)

Current capabilities of the Trans-Siberian railroad reviewed (44/69)

Industrial growth rates for 1969 may be smallest since World War II (45/69)

Soviets wrestle with labor force snags, to raise labor productivity (U) (46/69)

New gold mines at Muruntau producing (U) (47/69)

Painful decisions ahead for Soviet economic planners (48/69)

Soviets stress output of scientific gear which is exportable, to improve financial position (49/69)

Electronic Components

New semiconductor effect discovered by USSR could lead to new types of oscillators (29/69)

Airborne laser experiment conducted in 1966: military potential seen (34/69)

Amorphous semiconductor LED linked to making military electronics radiation-resistant (35/69)

New transistor-type pulse trigger could be useful in airborne, other compact radars (38/69)

Soviets claim progress in fuel cells, may use them in lunar craft (38/69)

New semiconductor technology could reduce costs of integrated circuits (U) (40/69)

Value of amorphous semiconductors, for radiation-resistant devices, disputed (42/69)

Soviets competent in studies of radiation damage to non-semiconducting electronic materials (51/69)





Electronics (General)

Unidentified radar may be used for counter mortar, counterbattery fire (41/69)
Nicknames for Soviet electronic equipment approved (U) (44/69)

Electronic Warfare (EW) (also see Recsats and Surveillance Satellites in "Space" section)

New X-band airborne jammer or improved model of older one reported (31/69)
SIDE NET a "popular" H/F because of antichaff performance: useless against Soviet noise jamming (38/69)
Optical device on new A-1 radar would be useful in low-altitude tracking or during ECM (39/69)
1 of 2 reported dispensers automatically cuts chaff to lengths effective against defense radars (40/69)
French report on Soviet use of tungsten chaff during invasion of Czechoslovakia doubted (41/69)
Soviets or ChiComs, in trying to jam the other's circuits, may have jammed PACFLT circuits (42/69)
Soviet AGS surprised by "Yorktown" helicopter: crewmen try to remove tell-tale antennas (45/69)
Cosmoses 130 and 169 tentatively estimated to be ELINT collectors (46/69)
BADGERS break radar lock-on of Korea-based F-102s (48/69)
Soviet naval units jam radars of Allied recon aircraft recently (48/69)
Soviet ACI off California coast jams radars of 2 US Navy ships (48/69)
New Soviet airborne VHF jamming capability observed (50/69)

Exotic Weapons

Neutral-particle beam generator is in principle best weapon of future, says Soviet physicist (36/69)

Fighters

Air-to-air combat techniques taught SU-7/FITTER pilots are described (U) (35/69)
Possible new variant of MIG-21/FISHBED noted (37/69)
Defector says Czech AF FITTERS can be armed with nuclear bombs (41/69)
FISHBED H carries internal cannon, has other features (49/69)

Foreign Affairs

USSR/Asia: Moscow sniffs the air before proposing collective security (27/69)
USSR/China: Charges of new incident may mean end of border-river talks (23/69)
Europeans express varying views of Nixon's Romanian visit (U) (29/69)
Moscow's anti-Peking propaganda puts fresh emphasis on military themes (33/69)
Breshnev puts best possible face on limited successes of Moscow conference (33/69)
Moscow again charges US mercy ships start epidemics abroad for BW studies (U) (34/69)
Soviets seem to be paving way for move against Peking, possibly diplomatic or political (35/69)
Soviets teach Egyptians to read US metaat photos produced by West German equipment (U) (34/69)
Moscow resumes criticism of China, still poses as victim of ChiCom unreasonableness (U) (34/69)
USSR/Communist China: Talks under way in Peking (U) (44/69)
Franco-Soviet trade growing but USSR running a deficit (U) (46/69)
Talks in Peking make little headway (47/69)
Soviet ambassador reportedly irritated by recent Egyptian statements (47/69)
Peking talks apparently stalemated but continuing (49/69)

Helicopters

Correction: Engines of HOMER not as powerful as stated in last week's WIR (U) (27/69)
HIP helicopter with rocket pods may be replacement for aging HOUND (32/69)
New copter record set before reported HOMER crash, or 2d HOMER has been built (S) (35/69)
Armament packages expand tactical capabilities of Soviet helicopters (38/69)

Identification, Friend or Foe (IFF)

Probable IFF noted on guidance radar for low-altitude SAM system (40/69)

Intercontinental Ballistic Missiles (ICBMs)

First firing in 19 months of PL-1, probable ICBM, apparently successful (28/69)
Highly-instrumented SS-9 launched: similar to firings which preceded MRV testing (29/69)
Studies on hardening ICBM RVs to X-ray, blast damage by nuclear-tipped ABMs apparently under way (31/69)
Launch of 13 July may have involved solid-propellant SS-13 ICBM (36/69)

Estimate that SS-11s are sited in groups of 10 agrees with statement attributed to CINC SRF (41/69)
Characteristics of multiple re-entry vehicles of SS-9 ICBM estimated (43/69)
SS-9 MRV ICBM fired 25 Oct much like its 3 predecessors (45/69)
SS-9 MRV ICBM testing continues (50/69)
Penetration aids possibly tested with SS-11 ICBMs (50/69)

Lasers

Reported Kiev studies on biological effects of lasers may be military related (41/69)
World's most powerful laser being assembled in USSR, says US physicist (47/69)

Logistics

New nuclear reactor could support remote military bases in Arctic (43/69)

Long Range Aviation (LRA)

Troop comm net could serve LRA staging bases, EW net: mobile tactical troops has been deployed (27/69)

Maritime

Plan to build first Soviet supertanker reported (47/69)

Medicine

Helmet to cool brain during surgery could be important medical advance (U) (23/69)
USSR presses for prevention of influenza, which causes substantial economic loss (U) (30/69)
Soviets adopting Western techniques for virus research: BW implications seen (31/69)
USSR buys French plant to make vaccine for foot-and-mouth disease (32/69)
New approach taken to fight flu, which takes economic toll in USSR (U) (41/69)

Meteorology (also see Metsats in "Space" section)

Meteorological research voyages planned by Soviets (U) (44/69)

Missile Firings (also see ICBMs, Ship-Launched Missiles)

Missile/space rangeheads only moderately active in June (23/69)
Missile/space rangehead activity reaching usual summer highs (32/69)
7 missiles, probably MRBMs, confirmed launched from Kapustin Yar on 23 July (35/69)
Missile launches low in August 1969, as they were in August 68 and 67 (37/69)
Testing of solid-propellant mobile SS-14 MRBM resumed after 11-month standdown (39/69)
Missile/space launches up slightly for September (41/69)
Missile/space rangeheads busy in October (49/69)
Missile, space launches for November down from October, but seasonal for the month (50/69)

Missile Propulsion

2d generation Soviet solid propellants may incorporate nitrogen fluoride compounds (41/69)
Glusko, chief rocket-engine designer, and his Khimki center, work on special-fuel engines (47/69)

Missiles (General)

New patrol craft with new missile system observed (28/69)
Soviet missile guidance systems still based on German designs (29/69)
SRF troop training missile firing schedule altered this year, for reasons unknown (32/69)
No new weapons shown in 7 Nov parade, 2 older ones missing (47/69)
Assessments of FROG performance largely substantiated by defector (51/69)

Navigation (also see Navsats in "Space" section)

Modified MUSHROOM bomb/navigation radar has better detection capability (36/69)
Claim of inertial navigation for Soviet commercial aircraft in doubt (38/69)

Navy (also see Ship-Launched Missiles, Submarines)

New Patrol craft with new missile system observed (28/69)
Soviet Navy in Med increasingly using base at Alexandria, Egypt (28/69)
BEARS rendezvous with naval force in North Atlantic (S) (29/69)
Soviet naval ships may conduct operations in Gulf of Mexico (29/69)
Unusual naval force in unusual 40-day operation in Barents Sea (30/69)
Soviet Navy units cruise Gulf of Mexico after visit to Cuba (32/69)
Helicopter carrier among numerous Soviet Navy ships entering Med this month (33/69)
Soviet naval build-up in Mediterranean continues (34/69)





Improved SAMs may be installed on new KRESTA-Class cruiser (35/69)
 NANUCHKA-Class missile gunboat probably undergoing sea trials (35/69)
 Large Soviet naval forces in ASW, amphibious ops in eastern Med (37/69)
 Mission of Moskva helo carrier described in Soviet pun as ASW (U) (38/69)
 Visiting Soviet scientist may seek US data on dolphin research, of naval interest (38/69)
 Soviet, Bulgarian ships shadow US ships in Black Sea, with circumsppection (39/69)
 Naval convoy completing 1969's crossing of Northern Sea Route to Pacific (40/69)
 Naval combatants being sent to Soviet Pacific Ocean Fleet via Indian Ocean (43/69)
 Possible new SAM on Soviet helo carrier may also be on modified KRESTA-Class cruiser (45/69)
 Soviet ACS surprised by "Yorktown" helicopter: crewmen try to remove tell-tale antennas (45/69)
 Missile fired 3,000 n.m. may be naval-associated, possibly SAWFLY (45/69)
 TOPSAIL, I-D radar on Moskva, believed accurate, good at detection and ECCM (47/69)
 Sub. outfit, passenger liner on unusual operation in Coral Sea (47/69)
 SAWFLY/H-III sub drawings presented (47/69)

Nuclear

Nuclear penetration bombs reported by detector (27/69)
 6th Soviet underground nuclear test of 1969 detected (28/69)
 Soviets seek foreign computers to exploit their accelerators, including world's most powerful (30/69)
 7th Soviet nuclear underground test of 1969 detected (31/69)
 Studies on hardening ICBM RVs to X ray blast damage by nuclear-tipped ABMs apparently under way (31/69)
 Soviets apparently have cladding problem with nuclear reactor fuel (33/69)
 2d type of collective ion accelerator proposed by Soviet scientist (U) (34/69)
 USSR quotes cut-rate prices for nukes supplied other countries for "Plovschare"-type projects (35/69)
 High priority of shock-loading studies, applicable to ABMs, indicated by use of nuclear shots (36/69)
 8th and 9th Soviet underground nuclear tests of 1969 detected (37/69)
 10th underground nuclear test of 1969 detected (38/69)
 11th Soviet underground nuclear test of 1969 conducted in gas-producing area (40/69)
 Soviets strive for high-energy physics lead with bigger, better accelerators (40/69)
 12th Soviet underground nuclear test of 1969 detected (41/69)
 Detector says Czech AF FITTERS can be armed with nuclear bombs (41/69)
 Soviets, unrestrained by alleged health hazards, preserve food by irradiation (41/69)
 Value of amorphous semiconductors, for radiation-resistant devices, disputed (42/69)
 13th Soviet nuclear underground test of 1969 held in Arctic (42/69)
 Finn's first nuclear power plant to be built by USSR (U) (43/69)
 New nuclear reactor could support remote military bases in Arctic (43/69)
 14th and 15th Soviet underground nuclear tests of 1969 detected (44/69)
 Soviets, Czechs make spurious offer to sell uranium to Swedes (49/69)
 16th Soviet nuclear underground test of 1969 detonated (50/69)
 Soviets competent in studies of radiation damage to nonsemiconducting electronic materials (51/69)

Petroleum, Oil & Lubricants (POL)

Soviet oil exports to Free World, which earn hard currency, unlikely to increase soon (31/69)
 Soviets bid to enter West European natural-gas market (U) (41/69)
 Plan to build first Soviet supertanker reported (47/69)

Political Affairs

Some provincial party leaders demoted, possibly in maneuvers for next party congress (35/69)
 Corruption: Party congress must be held before March 1970; maneuvering begins (36/69)
 Regime may commemorate Stalin's birth date, first time since 1955 (43/69)

Production Processes

Technological gap between USSR and West large in many areas, may be growing (29/69)
 Claimed advance in titanium alloy extrusions could be used in fabricating weapon systems (U) (30/69)
 Means for adapting high-quality EB welding to large items sought; would help in building subs, missiles (30/69)
 USSR may buy world's largest forging hammer from West Germany for aerospace craft (38/69)

Reconnaissance (also see Racsats in "Space" section)

19 June a busy day in Iceland-Fierres Gap (U) (30/69)
 Czechoslovaks try to get advanced US recon cameras through Switzerland (31/69)
 Red light flashes from device atop camera of crewman in nose of BEAR D (31/69)
 1 BEAR Ds reconnoiter carrier USS Saratoga east of Azores (U) (31/69)
 BADGERS approach naval force at 500 feet, not detected until 7-8 miles off (34/69)
 Probable BEAGLE overflies USS Perry at low altitude in Med, heads for Egypt (37/69)
 2 BEARS reconnoiter carrier Ticonderoga (U) (38/69)
 Soviets try again to obtain advanced US recon cameras (39/69)
 BEARS overfly Canadian aircraft carrier during NATO exercise (U) (39/69)
 Soviet submarine observed near Adak in the Aleutians (51) (40/69)
 Flashing lights observed in bomb bay of amphib which overflew US destroyers (40/69)
 Computers may help in near real-time processing of photos from recon aircraft, spacecraft (41/69)
 BADGERS overfly US aircraft carrier Constellation (44/69)
 "Yorktown's" A4Cs may have surprised reconnoitering BEAR Ds (50/69)

Science and Technology (S&T) (also see Medicine, Meteorology, Nuclear, "Space" section, and other headings)

Work of large Soviet atmospheric research group appears strongly related to military applications (29/69)
 Managerial system mainly to blame for Soviet technological lag (32/69)
 Soviets' Antarctic research may expand into new areas (U) (33/69)
 New clue in locating mineral deposits discovered (U) (35/69)
 Recent boasts about USSR scientific manpower may be true but need interpretation (35/69)
 Soviets report new record low working temperature (35/69)
 Outspoken scientist punished: loses security clearances, most privileges (36/69)
 Soviets organize S&T-information handling center for "allies": their motives mixed (U) (38/69)
 Soviets progress on making world's largest telescope (U) (39/69)
 USSR's technological lag could have serious political implications (40/69)
 Soviet chemical engineering spotty, ranges from very good to very bad (40/69)
 Soviets strive for high-energy physics lead with bigger, better accelerators (40/69)
 Soviets to buy still more US color TV technology (41/69)
 Soviets may be leapfrogging US in electron spin resonance apparatus (45/69)
 World's most powerful laser being assembled in USSR, says US physicist (47/69)
 Soviets stress output of scientific gear which is exportable, to improve financial position (47/69)
 Designer of 1,740-foot Ostakino tower now designing a 1,000-meter tower (U) (49/69)
 Soviets plan world's largest colliding-beam accelerator (49/69)
 Acoustics research pushed, probably in support of future Soviet sub operations (50/69)
 Soviets excel in catalysis theory, lag in results: one thing wrong with USSR chemical industry (U) (51/69)

Ship-Launched Missiles

Missile fired 3,000 n.m. may be naval-associated, possibly SAWFLY (45/69)
 New naval missile tentatively designated the SS-NX-5 (46/69)
 SAWFLY/H-III sub drawings presented (47/69)
 SLBM launched from Soviet Far East may have been SS-N-6 (49/69)

Sociology

Military-patriotic writings on decline in USSR, some of it distorted, says newspaper (U) (27/69)
 Outspoken scientist punished: loses security clearances, most privileges (36/69)
 Soviet scientist, potential minister of higher education, would make changes (36/69)
 Soviet TV expanding: qualitative lag as bad as quantitative lag (39/69)
 Red jamming of US radiobroadcasts, resumed after invasion of Czechoslovakia, continues (U) (45/69)
 Soviets wrestle with labor force snags, to raise labor productivity (U) (46/69)

Soviet Rocket Forces (SRF)

SRF troop training missile firing schedule altered this year for reasons unknown (39/69)
 Estimate that SS-11s are sited in groups of 10 agrees with statement attributed to CINC SRF (41/69)





Space (see separate "Space" section)

Submarines

- 2 Polaris-type Soviet subs enter Norwegian Sea (32/69)
- Cruise-missile sub nearing Caribbean: may be having trouble (33/69)
- Soviet missile submarine OB will be published quarterly in WIR (36/69)
- Soviets' latest ship-noise control techniques still not installed on latest subs (39/69)
- Soviets look to drugs to counter loss of oxygen in space or underwater craft (U) (39/69)
- Soviet submarine observed near Adak in the Aleutians (40/69)
- Soviet submarine OB presented (U) (44/69)
- New diesel sub designed at same time nuclear subs were being developed (47/69)
- SLBM launched from Soviet Far East may have been SS-N-6 (47/69)
- Acoustics research pushed, probably in support of future Soviet sub operations (50/69)
- Missile-carrying J-Class sub moves to Pacific via Indian Ocean (50/69)

Surface-to-Air Missiles (SAMs)

- SAM-guidance radars in North Vietnam may have optical tracker (30/69)
- Photography of modification of FAN SONG B radars in North Vietnam presented (31/69)
- Tight burst pattern of SA-2 warhead confirmed by photography (35/69)
- Improved SAMs may be installed on new KRESTA-Class cruiser (35/69)
- Probable IFF noted on guidance radar for low-altitude SAM system (40/69)
- About 70 long-range SA-5 SAM complexes built to date (40/69)
- SA-3 SAM officers shown target intercept zone on scope during engagement (43/69)
- Possible new SAM on Soviet Aulo carrier may also be on modified KRESTA-Class cruiser (45/69)
- Two versions of SA-3 SAM reported (45/69)
- GOA/SA-3 booster is hotter than previously estimated (46/69)
- Max range of SA-3 SAM said to be 100 km: this is at low end of Western estimate (46/69)
- Box on FAN SONG missile-guidance radar in North Vietnam confirmed as optical tracker (47/69)
- ECCM features of GOA/SA-3 SAM system described (47/69)
- Optical device on SAM radars identified, characteristics given (48/69)
- SA-3 warhead fuzing and guidance much like the SA-2's (48/69)
- Times required for SA-3 SAM system to switch to new target reported (49/69)

Transport Aircraft

- All-titanium version of TU-144 SST reportedly being developed (28/69)
- Photos of TU-144 presented (U) (33/69)
- TU-144 flown supersonically on long flights, TASS says (U) (35/69)
- Turboprop version of small AN-14/CLOD transport makes first flight (U) (37/69)
- Claim of inertial navigation for Soviet commercial aircraft in doubt (38/69)
- Stretch model of IL-62 will have greater payload/passenger capacity and range (43/69)
- Soviet SSTs will probably use kerosene-type fuels (47/69)

NATIONS & AREAS OTHER THAN USSR

Africa (also see North Africa, South Africa, and Middle East)

- Africa remains a major scene of Peking's diplomacy (27/69)
- Biafrans threaten Nigerian oil (28/69)
- Hailu Selassie maintains control of Ethiopia, but pressures for change threaten his rule (U) (29/69)
- Zanzibar re-examining its economic ties with Communists (32/69)
- Nigeria: War still stalemated (U) (32/69)
- Ethiopia: Internal pressures could cause crisis when emperor leaves scene, or even before (38/69)
- Sudan: New regime may oust some Communists (39/69)
- Building of TanZam railroad to begin next year with ChiCom assistance (41/69)
- Opposition to Sudan's "Arab" revolution not effective now (41/69)
- West Germans plan to explore for uranium in Mali (43/69)
- Somali coup may spell end of detente with Ethiopia (43/69)
- Final details of building ChiCom-sponsored Tanzania-Zambia railroad being worked out (46/69)
- Leftist regime of Congo (Brazzaville) again threatened by political turmoil (47/69)

- Zambia: Soviet mining equipment arrives, for use by Swiss firm (47/69)
- Guinea: Conakry takes help from all quarters (U) (50/69)
- Sudan: Soviets agree on trade and aid with new regime (U) (50/69)
- Ghana: Soviets may lose out as POL suppliers (50/69)

Albania

- Albania reportedly tries to buy seismic gear for China ally (30/69)
- Albania moving out of isolation (U) (39/69)
- Moscow said to seek better relations with Tirana (48/69)

Antarctica

- Soviets' Antarctic research may expand into new areas (U) (53/69)

Communist China (Foreign Affairs)

- Africa remains a major scene of Peking's diplomacy (27/69)
- USSR/China: Charges of new incident may mean end of border-river talks (28/69)
- Moscow's anti-Peking propaganda puts fresh emphasis on military themes (33/69)
- Tensions led to border clash w/USSR which could, in turn, lead to more tensions (35/69)
- China's trade with industrial West recovering, but not booming (37/69)
- Soviets seem to be paving way for move against Peking, possibly diplomatic or political (38/69)
- China's support of Burma rebels probably not all-out effort at South Asia "takeover" (39/69)
- Moscow resumes criticism of China, still poses as victim of ChiCom unreasonableness (U) (39/69)
- Building of TanZam railroad to begin next year with ChiCom assistance (41/69)
- Peking may restore closer relations with Hanoi (44/69)
- USSR/Communist China talks under way in Peking (U) (44/69)
- Talks in Peking make little headway (47/69)
- Yugoslavia/Communist China: Two countries, bitter opponents for 11 years, may exchange ambassadors (U) (48/69)
- Peking talks apparently stalemated but continuing (49/69)
- Ceylon/Communist China: Newest rice/rubber deal is less favorable to China (U) (49/69)

Communist China (Internal Affairs)

- Birth control program in China now more feasible but big push not in evidence yet (27/69)
- Peking getting tougher toward rebellious, in search for stability (32/69)
- Premier Chou En-lai -- the Confucian Communist (U) (32/69)
- China may cut privileges of those who get cash from abroad; foreign exchange may be lost (33/69)
- Peking still frustrated by domestic problems (35/69)
- China's trade with industrial West recovering, but not booming (37/69)
- China's "war preparations" encountering apathy (38/69)
- Cholera reported in two widely separated areas (40/69)
- Need for school "reform" helped spark Cultural Revolution: training now replaces education (40/69)
- Some Chinese colleges reopen; some move to suburbs (42/69)
- Peking's party-building efforts hit snags (46/69)
- Chinese agriculture has good year (46/69)
- Trends uncertain in China after 20 years of Communist rule (48/69)
- Medical services letdown of Cultural Revolution forces China to adopt new antiviral campaign (50/69)

Communist China (Military)

- Peking propagandists need for "war preparation" but no major mobilization noted (31/69)
- ChiCom military high command apparently reorganized (31/69)
- China's chief of the general staff a rising figure but his post is a sensitive one (32/69)
- 6th ChiCom R-Class conventional attack submarine built (34/69)
- Political role of China's military poses problems (34/69)
- Skirmish in war of nerves between Chinese, Soviet border guards described in Soviet radio-cast (U) (34/69)
- China's "war preparations" encountering apathy (38/69)
- China building possibly new amphibious craft (38/69)
- ChiComs may have built AI radar similar to US's MIC-10A (38/69)
- ChiCom's 1st nuclear test of 1969 detonated underground (39/69)
- Communist China's 10th nuclear test, of high yield, conducted in atmosphere (40/69)
- ChiCom MIG-19s "made by hand," said to be better than those made by Soviets (42/69)
- Chinese militia training now includes CW (U) (44/69)
- Jet medium bomber production in China (47/69)
- ChiComs building their largest naval ship (48/69)
- Performance and characteristics of new ChiCom AI radar estimated (49/69)
- ChiComs strengthen defense of Shanghai area against attack by air from seaward (50/69)



Communist China (Science & Technology)

- Albania reportedly tries to buy seismic gear for China ally (30/69)
- ChiCom germanium crystals of better quality than Soviets' (41/69)
- ChiCom petrochemical industry expansion may be held back by self-reliance policy (42/69)
- ChiComs finally produce neoprene, a rubber of military, economic significance (C) (43/69)
- Some Chinese colleges reopen; some move to suburbs (43/69)

Communist World (also see individual nations, Eastern Europe, and Warsaw Pact)

- Singapore attracts Communist commercial interest (U) (43/69)
- Moscow trying to get Romania to justify invasion of Czechoslovakia (43/69)

Cuba

- Castro moderates revolutionary line, seeking recognition by Latin American states (U) (30/69)
- Radio Havana ends broadcast aimed at Venezuelan regime (32/69)
- Cuban academy of sciences off to a sound start and growing (38/69)
- Battlefield surveillance radar detected in Cuba (39/69)
- New antihijack law has drawbacks but may do some good (40/69)
- MIG-17 pilot defected because he "could not live" in Cuba (42/69)
- Cuba's 1970 sugar output may reach 7-8 million tons, a new record but well short of goal (43/69)
- Castro intent on producing 10 million tons of sugar in 1970, despite poor outlook (46/69)
- Czechoslovak's visit still unexplained (48/69)
- Cubans try in vain to adapt ATOLL AAM to SAM role (49/69)
- Cuba/Mexico: Proposed air link might bypass close scrutiny now given Cuba-Latin America travelers (49/69)
- Havana seeks closer economic ties with its neighbors (49/69)

Cyprus

- Cyprus's problems remain unsettled (U) (49/69)

Czechoslovakia

- Infighting persists; people alienated by Husak's cooperation with hard-liners (27/69)
- Aerosolized LSD tested by Czechoslovak military, possibly for covert use (30/69)
- Means for adapting high-quality ED welding to large items sought; would help in building subs. missiles (30/69)
- Husak regime tries to consolidate power as first year of occupation nears end (30/69)
- Czechoslovaks try to get advanced US recon cameras through Switzerland (31/69)
- Regime and Soviet occupiers tense as first anniversary of invasion approaches (32/69)
- Husak still pressured by Soviets, conservatives despite praise for his handling of disorders (35/69)
- Conservatives still pressuring Husak (36/69)
- Moscow apparently not happy with attitudes of Czechoslovak servicemen (37/69)
- Husak, pressured by Soviets and pro-Soviet conservatives at home, stalls (38/69)
- Economic deterioration helps conservatives who press for tighter controls (32/69)
- Higher party echelons being purged, lower echelons next (40/69)
- Conservatives stronger, but still not in the saddle (41/69)
- Capsules (U) (43/69)
- Meeting in Moscow ends (U) (44/69)
- Another influential post taken over by pro-Soviet conservative (45/69)
- Leaders focus on political and economic problems (U) (48/69)
- Head of Czechoslovak Academy of Sciences resigns, under pressure for liberal views (49/69)
- Czech aerosol expert flies to Paris after laboratory fire (49/69)
- Soviets, Czechs make spurious offer to sell uranium to Swedes (49/69)
- Capsules (U) (49/69)
- Camouflage material developed in Czechoslovakia may be relatively invulnerable to IR film (50/69)
- Husak regime still not ready to work out economic plans (50/69)
- Regime trying to put out economic fires before undertaking major overhaul (51/69)

Eastern Europe (also see individual nations)

- Bloc differences mar Polish anniversary (32/69)
- Nixon visit to Romania irritates other Communist states (34/69)
- Western tourists increasingly important to hard currency earnings of USSR, Eastern Europe (35/69)
- Soviets organize S&T-information handling center for "allies"; their motives mixed (U) (35/69)
- East Germany may abandon pharmaceutical R&D under reported "division of labor" plan (41/69)
- Agricultural prospects mixed this year (U) (41/69)
- Chile invites Communist East Europe to help develop its copper (42/69)

- Red jamming of US radiobroadcasts, resumed after invasion of Czechoslovakia, continues (U) (45/69)
- Soviets concerned about satellites' contacts with West (45/69)
- Normalization of relations between Yugoslavia and Warsaw Pact nations failing (47/69)

East Germany

- Iraq helped by new economy aid agreements with USSR, East Germany (U) (30/69)
- Ulbricht reportedly recovering from flu; not likely to retire until forced to do so (34/69)
- East Germany may abandon pharmaceutical R&D under reported "division of labor" plan (41/69)
- Ulbricht worried about East Germany becoming isolated on West German problem (43/69)
- East-West trade grows fast (48/69)

France

- France building a second isotope separation plant (U) (29/69)
- Franco-Soviet trade growing but USSR running a deficit (U) (46/69)
- Accident closes down newest French nuclear-power reactor (48/69)
- France may produce 2-engined version of Mirage G, despite problems (U) (50/69)

Hungary

- Economic reforms pushed cautiously to avoid adverse Soviet reaction (31/69)
- Budget now more cooperative with US, probably with Soviet permission (33/69)
- Youth troubling Hungarian regime (34/69)
- Hungary, most advanced East European nation in drug studies, to begin ACTH production (38/69)
- USSR scans Hungary's economic reforms to prevent loss of party control (40/69)
- Kadar hopes for relaxation of tensions (44/69)
- Purge may be on in Interior Ministry (51/69)

Japan

- Ed investment deal with USSR proposed (U) (36/69)
- Moscow expands trade with Japan, seeking more Japanese investment in Siberia (37/69)
- USSR/Japan: Joint thermal electric-power project proposed (42/69)
- Leftist drive against Japan-US ties set back (44/69)
- Japan eager to be 4th nation to launch satellite but spends little money on the effort (U) (47/69)

Korea

- 4 North Koreans killed in 2 DMZ incidents on 27 July (31/69)
- North Korea suffering economic, political setbacks, seeks prestige through UNC apologies (37/69)
- Three attempts to infiltrate by sea thwarted (40/69)
- Agent boat sunk; attempted infiltration only helped gov't's referendum campaign (43/69)

Middle East (also see North Africa)

- Suez closure speeds up development of overland trade routes (U) (27/69)
- Soviet Navy in Med increasingly using base at Alexandria, Egypt (23/69)
- Soviets get little from Iraqi and Syrian Baathists for their aid (28/69)
- Arab aircraft losses mount (23/69)
- Israel adopting a more aggressive military posture (U) (29/69)
- Iraq helped by new economic aid agreements with USSR, East Germany (U) (30/69)
- Pace of military action intensifies (U) (30/69)
- Capsules (U) (34/69)
- Israel cautious in settling conquered lands, seeking outcome of efforts at political settlement (36/69)
- Libya: Coup apparently engineered by junior officers (36/69)
- Extremist group plans terrorism against Israeli "imperialist" facilities outside Middle East (37/69)
- Jordan: Internal security deteriorating (37/69)
- Egypt: Nasser having troubles -- political and personal -- but he's not in immediate peril (U) (40/69)
- Problem of security against fedayeen increasing in Israel (41/69)
- Soviets continue delivery of military gear (to BAR) (44/69)
- South Yemen: Soviet presence growing quietly (46/69)
- Soviet ambassador reportedly irritated by recent Egyptian statements (47/69)
- Israel may tighten security in Gaza and El Arish areas (U) (48/69)
- Arab's war of attrition against Israel having unintended effects (49/69)
- Lebanon: New cabinet faces test on fedayeen policy (U) (49/69)
- Big-Four peace talks resume as Mideast strife continues (U) (50/69)

North Africa (also see Middle East)

- Algeria: Country now getting better organized (31/69)
- Libya: Coup apparently engineered by junior officers (36/69)
- Libya: New regime settling down; policies, power focus puzzling (37/69)





Algeria: Soviet delegation arrives, probably to push lagging aid program (43/69)
 Algeria: Soviet aid program moves slowly (46/69)
 Tunisia's pro-Western Bourguiba faces foreign, domestic problems (U) (47/69)
 Libya: New regime fumbles (47/69)

North Vietnam (Foreign Affairs and Foreign Logistical Support)

Shipments of food, trucks to North Vietnam are up, but total cargo declines (30/69)
 Lull in foreign shipping to North Vietnam probably seasonal (33/69)
 Controversy over Swedish aid to Hanoi continues (U) (43/69)
 Peking may restore closer relations with Hanoi (44/69)
 Leaders tour other Communist countries (U) (44/69)
 Soviet merchant ship use increased in deliveries to NVN (44/69)
 Soviets again using large tankers for delivery of POL to NVN (44/69)

North Vietnam (Internal Affairs)

Policy deliberations may be under way (30/69)
 Hanoi's claim bombing halt was a victory has been counterproductive (31/69)
 Hanoi beset by economic ills (34/69)
 No immediate policy changes seen as resulting from Ho's death (37/69)
 Capsules (U) (38/69)
 Serious epidemic reported, probably of dengue fever (41/69)
 Imports drop in September (43/69)
 Hanoi leader discusses national priorities (44/69)
 Cracks show in the collective facade (46/69)
 Hanoi lashes out at "Vietnamization" of war (U) (47/69)
 New public order and security measures put into effect in Hanoi (50/69)
 Law-and-order crackdown may be nationwide (51/69)

North Vietnam (Military)

SAM-guidance radars in North Vietnam may have optical tracker (30/69)
 Photography of modification of FAN SONG B radars in North Vietnam presented (31/69)
 Possible ELINT gear noted in North Vietnam (34/69)
 North Vietnam has 35-40 SAM firing battalions (36/69)
 Soviet 130mm field guns sighted near DMZ (44/69)
 Box on FAN SONG missile-guidance radar in North Vietnam confirmed as optical tracker (47/69)

Poland

Polcs show interest in more trade with West Germany (U) (27/69)
 Bad weather hurts crops; imports from West may be needed (35/69)

Romania

Europeans express varying views of Nixon's Romanian visit (U) (29/69)
 Fears of Warsaw Pact pressures lead to increased visits to neighboring states (29/69)
 Soviet irritation with Nixon visit to Bucharest evident in "New Times" (U) (32/69)
 Spokesmen state divergent views but avoid open clash (with USSR) (33/69)
 Nixon visit to Romania irritates other Communist states (34/69)
 Iron-ore purchases from India to reduce Romanian dependence on USSR (36/69)
 Romania wants no Pact exercises on its soil; will not participate in those held elsewhere (39/69)

Scandinavia

Swedish search for new CW agent admitted (36/69)
 Finn's first nuclear power plant to be built by USSR (U) (42/69)
 Controversy over Swedish aid to Hanoi continues (U) (43/69)
 Soviets, Czechs make spurious offer to sell uranium to Swedes (49/69)

South Africa

South Africa loses ground on pricing of gold (50/69)

South Asia

Indian space program accelerating; now based partly on native designs and manufacture (29/69)
 India: Mrs. Gandhi wins but opponents wait for next opportunity (31/69)
 Pakistan: Leftist unrest surfaces in east, where nation's most difficult problems lie (36/69)
 Iron-ore purchases from India to reduce Romanian dependence on USSR (37/69)
 China's support of Burma rebels probably not all-out effort at South Asia "takeover" (39/69)
 India: Formal split in Congress Party a growing probability, could lead to instability (45/69)
 Burma arranges to complete projects started by ChiComs; now taking little Red aid (49/69)
 Ceylon/Communist China: Newest rice/rubber deal is less favorable to China (U) (49/69)

South & Central America and Caribbean (also see Cuba)

Sweeping land reform in Peru strikes at heart of usually ruling oligarchy (27/69)
 Radio Havana ends broadcast aimed at Venezuelan regime (32/69)
 El Salvador/Honduras: Fighting ends but problems persist (U) (32/69)
 More economic reforms planned for Peru; move to Marxist society denied (U) (31/69)
 Rising sentiment against Salvadorans in Honduras could breed new troubles (33/69)
 Ambush indicates not all guerrillas have been eliminated (from Colombia) (33/69)
 Peru: Military regime courts lower classes with promise of voting rights for illiterates (34/69)
 New Bolivian regime stresses nationalism, hopes to follow Peru's example (41/69)
 Venezuela: Military concerned about recent guerrilla activity (41/69)
 Guatemala: Largest guerrilla action of recent times reported (42/69)
 Chile invites Communist East Europe to help develop its copper (42/69)
 Soviet "trade union" leaders visiting Colombia, Venezuela (42/69)
 Dominican Republic: Violence on all sides mars presidential campaign (U) (43/69)
 Bolivia: US oil company is expropriated (U) (44/69)
 Chile: Army uprising sets off political reaction (44/69)
 Cuba/Mexico: Proposed air link might bypass close scrutiny now given Cuba-Latin America travelers (49/69)
 Havana seeks closer economic ties with its neighbors (49/69)
 Uruguay: Red terrorism continues (U) (49/69)
 Guatemala: New guerrilla incidents break out (U) (50/69)
 Dominican Republic: Violence may increase as election date nears; future of Balaguer rule uncertain (50/69)
 Virgin Islands: Soviet-built hydrofoil boat immobile; Moscow sends technicians (50/69)

Southeast Asia (also see N. Vietnam and S. Vietnam)

Thailand: Reds may try to start operations in new northeast area (32/69)
 Indonesia's economy stabilizing, growth now being sought (U) (35/69)
 Cholera on the rise (U) (39/69)
 Thailand: Reds work to strengthen village-level groups (42/69)
 Cambodia to supply the Viet Cong (44/69)
 Thailand: Red insurgents readying for dry-season activity (47/69)
 Singapore attracts Communist commercial interest (U) (48/69)
 China/Hong Kong: Peking catering to US tourists (U) (50/69)
 Soviets seek to expand air routes in area (50/69)
 Laos: Communist road-building in northwest progresses rapidly (51/69)

South Vietnam

Capsules (U): 27/69, 28/69, 29/69, 30/69, 31/69, 32/69, 33/69, 34/69, 35/69, 36/69, 37/69, 38/69, 39/69, 40/69, 41/69, 43/69
 Reds' "high point" strategy has political aim; intensity of attacks declining (43/69)
 Enemy morale lower in Vietnam but enemy capabilities still not seriously degraded (43/69)
 Cambodia to supply the Viet Cong (44/69)
 Viet Cong make shaped-charge demolitions (44/69)
 Friction in Communist forces revealed (44/69)
 Capsules (U): 45/69, 46/69, 47/69
 Hanoi lashes out at "Vietnamization" of war (U) (47/69)
 Capsules (U): 48/69, 49/69
 Some officers cautiously optimistic about Vietnamization of war (50/69)
 Enemy preparations for heavier fighting nearing completion (51/69)

Turkey

Soviets to increase aid in building new industries (U) (43/69)

United Nations

Soviets show interest for first time in financing UN peacekeeping operations (37/69)

United States

Budapest now more cooperative with US, probably with Soviet permission (33/69)
 Moscow again charges US mercy ships start epidemics abroad for BW studies (U) (34/69)

Warsaw Pact

Indicators of impending Warsaw Pact activity noted (33/69)
 Warsaw Pact forces still effective in defense of USSR, despite periodic differences (40/69)
 Normalization of relations between Yugoslavia and Warsaw Pact nations failing (47/69)
 Warsaw Pact presses initiative on European security conference (47/69)





Western Europe (also see France, W. Germany, Scandinavia, and Cyprus)

Soviets bid to enter West European natural-gas market (U) (43/69)
Warsaw Pact presses initiative on European security conference (47/69)
Hard-up Spanish fisheries reportedly to be helped by Soviets (50/69)

West Germany

Poles show interest in more trade with West Germany (U) (27/69)
West Germans plan to explore for uranium in Mali (43/69)
East-West trade grows fast (49/69)

Yugoslavia

Soviets try to silence Yugoslav criticism with pseudo-rapprochement moves (30/69)
Yugoslav regime worried over regionalism breakdown in authority (41/69)
Yugoslavia builds tankers for USSR (U) (44/69)
Inefficient enterprises in Yugoslavia must reform or be liquidated (U) (46/69)
Normalization of relations between Yugoslavia and Warsaw Pact nations failing (47/69)
Yugoslavia/Communist China: Two countries, bitter opponents for 11 years, may exchange ambassadors (U) (48/69)
Self-management of economic enterprises has mixed results in Yugoslavia after 20-year trial (51/69)

SPACE

Communication Satellites (Comsats)

13th Molniya communications-relay satellite is launched (U) (30/69)
Satellite, submarine cable figure increasingly in global communications; Soviet participation minor (U) (31/69)
Maneuverable recsats probably used Molniya's correction engine (35/69)
Study possibly relating to secure communications, multiple access to comsats, published (42/69)
Molniya comsats, SSES KOMAROV, gave communications support to Soyuz operation (U) (47/69)

Lunar Probes/Missions

Another major Soviet lunar attempt apparently planned for mid-July (27/69)
Soviets launch heavy payload toward moon (29/69)
Mission of Luna 15 still not known (30/69)
Mascos may have contributed to Luna 15 failure; lunar shot may reveal Luna 15 mission (31/69)
Zond 7's mission probably is to man-rate lunar-related systems (33/69)
Zond 7 mission apparently successful; may be prelude to manned lunar mission (34/69)
Zond 7's color photos of Moon probably of little value in planning manned landings (U) (36/69)
Lunar shot coming; 2 SSESs in Havana (37/69)
Cosmos 300 a lunar probe failure, a setback for Soviet manned lunar mission (39/69)
Cosmos 300, lunar probe failure, probably deorbited over USSR (41/69)
Another Soviet lunar probe fails (44/69)
Cosmos 305 not a payload, though Soviets said it was (45/69)
Production of SL-12 launchers appears to be up this year (46/69)
SL-12 propulsion system fails for 7th time this year (47/69)
Claims of translunar communication probably in error, based on faulty spacetracking (51/69)

Maneuvering Satellites (also see Comsats and Recsats)

Cosmos 291 probably was intended to maneuver but did not do so (35/69)
Launch failure of 1 Nov may have involved maneuvering satellite (45/69)

Manned Flight

Mild, temporary hypoxia may be tried to improve cosmonaut performance (32/69)
Use of artificial gravity environment not in immediate prospect for Soviet MOLEs (32/69)
Speech analysis may help monitor emotional state of cosmonauts (33/69)
Space lab preparations being made; early Soyuz flight could pave the way (35/69)
Docked Soyuzes to form first space station; individual Soyuzes will be ferry/supply modules (U) (36/69)
Soviet cosmonauts reportedly number 50-75, about same as US group (38/69)

Soviets look to drugs to counter loss of oxygen in space or underwater craft (U) (39/69)
Soyuzes 6, 7, 8 launched; two have docking gear but have not docked yet (42/69)
Soyuzes 6, 7, 8 probably failed in main mission; may have observed three ICBM launches (43/69)
Soviet scientist claims carbon dioxide compensates for oxygen lack (U) (44/69)
Soyuzes' capabilities for crew transfer and other EVA are limited (45/69)
Cosmonauts confirm Soviet stress on automating spaceflight; admit to weightlessness problem (48/69)
Biosensors requiring no contact with skin developed for long manned spaceflight (U) (49/69)
No dehydrated foods on Soviet space flights (50/69)

Meteorological Satellites (Metsats)

Low priority of Soviet metsat program apparently to continue (32/69)
New "Meteor" launched, 2d Soviet metsat of 1969 (U) (41/69)
Soviet metsat tested picture-sending system similar to US's APT (41/69)
Video from metsat Meteor 1 is sporadic (U) (45/69)
Second center to receive metsat data being set up, a third one planned (U) (46/69)

Navigational Satellites (Navsats)

Cosmos 232 a navaid satellite (34/69)
Higher-altitude navsats may support military users, lower-altitude craft civilian users (38/69)
Soviets launch another navigation satellite (44/69)
Cosmos 304 apparently fails in its navsat mission (45/69)
Cosmos 312 believed to be a navsat (47/69)

Nations other than USSR

Indian space program accelerating; now based partly on native designs and manufacture (29/69)
Soviets teach Egyptians to read US metsat photos produced by West German equipment (U) (39/69)
Interkosmos 1 a probable research satellite (42/69)
Germany, Czechoslovakia built some of the instruments on Interkosmos 1 (U) (43/69)
Japan eager to be 4th nation to launch satellite but spends little money on the effort (U) (47/69)

Reconnaissance Satellites (Recsats)

Two Soviet recsats in orbit; Cosmos 288 launched (27/69)
Recsats Cosmoses 287 and 288 deorbited routinely (33/69)
Cosmos 289, high-resolution photo recsat, flies 5-day mission (29/69)
Cosmos 290 a recsat (30/69)
Soviets deorbit recsat Cosmos 290 (31/69)
Cosmos 291, first Soviet recsat in nearly four weeks, may carry piggy-back payload (34/69)
Cosmos 294 a high-resolution photoreconnaissance satellite (35/69)
Maneuverable recsats probably used Molniya's correction engine (35/69)
Recsats Cosmos 293, 294 deorbited after 12-, 8-day flights (36/69)
High rate of recsat launches continues; Cosmos 296, 297 launched (36/69)
Recsats Cosmos 296, 297 deorbited (37/69)
Soviets deorbit recsat Cosmos 299 early, apparently in hurry for photos (37/69)
Cosmos 301 a recsat (40/69)
Recsat Cosmos 301 deorbited on time (41/69)
Computers may help in near real-time processing of photos from recon aircraft, spacecraft (41/69)
Cosmos 302 another recsat (43/69)
Soviets deorbit Cosmos 302 (44/69)
Cosmos 306 orbited (U) (44/69)
Recon Cosmos 306 may stay up for 11-12 days (45/69)
Recon Cosmos 306 deorbited after 12-day mission (46/69)
Cosmoses 309, 310 are Soviets' 29th, 30th recsats launched in 1969 (47/69)
Monitoring of naval movements, concentrations may be major mission of ELINT gear on recsats (47/69)
Recsat Cosmos 309, 310 deorbited routinely (43/69)
Cosmoses 309, 310 may be testing new 6-satellite surveillance system (49/69)
Cosmos 313, Soviets' 31st recoverable recsat of 1969, may carry piggy-back payload (50/69)
Recsat Cosmos 313 deorbited after 12 days (51/69)
Certain recoverable recsats may have executed both IR and visual-spectrum photography (51/69)
Map of surveillance coverage of Cosmos 299, 299 presented (51/69)

Research Satellites

Cosmos 261 conducting auroral research (U) (29/69)
Military's permission sought to release details of research satellites before launch (30/69)
Proton 4 decays (32/69)





Cosmos 295 believed to be a research satellite, as claimed (35/69)
 Research satellite Cosmos 295 probably failed in flight (36/69)
 Apparent research satellite launch attempt of 23 July a failure (36/69)
 Interkosmos 1 a probable research satellite (42/69)
 Cosmos 303 a research satellite (43/69)
 Germany, Czechoslovakia built some of the instruments on Interkosmos 1 (U) (43/69)
 USSR launches Cosmos 307 (U) (44/69)
 Cosmos 308 An environmental research satellite (46/69)
 Mating of Interkosmos 1 with carrier rocket upper stage shown in press (U) (46/69)
 Cosmos 262 studies vacuum-ultraviolet and soft X-ray radiation. Soviets say (U) (47/69)
 Cosmos 311 a research satellite (48/69)
 Cosmoses 142, 154 check on ionospheres' influence on ultralong radio-waves, says Pravda (U) (49/69)
 Cosmos 314 a research satellite (51/69)

Space Communications

Antenna shown in Pravda may receive TV transmissions from manned spacecraft (35/69)
 Molniya comsats. SSES Kumarov, gave communications support to Soyuz operation (U) (47/69)
 Claims of transaural communication probably in error, based on faulty spacetracking (51/69)

Spacecraft Equipment and Systems

Soviets seek composite solid lubricants for spacecraft: in/o sought at meeting (40/69)
 Unique horizon sensing may result from observations made during Soyuz flights (50/69)
 Solar welding, uniquely adapted to space use, studied in USSR (51/69)

Space (General)

Soviet space program nearly keeping up last year's record pace (25/69)
 Correction: Cosmos 186 listed incorrectly in WIR 25/69 (U) (23/69)
 Military's permission sought to release details of research satellites before launch (30/69)
 Cosmonaut Fentistov may be new chief designer of spacecraft/rockets, vice Korolev, deceased (42/69)
 Soviets play varied tunes on whether there is a space race (U) (42/69)
 Imports of space-environment simulators can aid in gauging progress of Soviet space effort (42/69)

Space Propulsion

Liquid hydrogen apparently still eyed as potential high-impulse space fuel (34/69)
 Report that USSR has had "nuclear propelled rockets" for two years probably a misinterpretation (U) (37/69)
 Production of SL-12 launchers appears to be up this year (46/69)
 Yantar 1 plasma ion engine used argon, later Yantars used nitrogen from atmosphere (U) (46/69)
 Glushko, chief rocket-engine designer, and his Khimki Center, work on special-fuel engines (47/69)
 SL-12 propulsion system fails for 7th time this year (49/69)

Space Stations

Docked Soyuzes to form first space station: individual Soyuzes will be ferry/supply modules (U) (36/69)

Spacetracking and Control

COD EYE on space-event support ship may be Luneberg-lense type antenna (36/69)
 Aircraft a part of space-control system, says Pravda (U) (51/69)
 Claims of transaural communication probably in error, based on faulty spacetracking (51/69)

Space Weapons

Cosmos 298 a FOBS, first launched this year (38/69)
 SS-X-6 performance believed adequate for operational FOBS mission (33/69)
 SS-X-6 launch probably a troop-training firing (39/69)

Surveillance Satellites

Cosmoses 260 and 263 tentatively estimated to be ELINT collectors (40/69)

Vertical Launches

Yantar 1 plasma ion engine used argon, later Yantars used nitrogen from atmosphere (U) (46/69)

SHOP TALK

New policy governs routing of requests by non-NORAD units to be placed on WIR distribution (U) (32/69)
 Injured sailor probably got "intelligence treatment" instead of medical treatment (U) (31/69)
 Video recorder/reproducer useful in RADINT analysis, training at Alaskan radar sites (40/69)
 Requests for NORAD/CCNAD intelligence publications (U) (47/69)
 Armed forces radio-TV station at Keflavik invaded by local Vietnam moratorium supporters (U) (47/69)

ILLUSTRATIONS

Aircraft (General)

MOSS -- AWAC variant of TU-114 (photo) (47/69)

Air-to-Air Missiles (AAMs)

AA-3, AA-5 performance and characteristics (U) (3 tables) (29/69)
 Soviet ANAB/AA-3 air-to-air missile (U) (drawing) (43/69)

Antiballistic Missiles (ABMs)

The GALOSH (U) (5 photos, 1 drawing) (37/69)

Bombers

Loading bombs on a BISON (U) (press photo) (27/69)
 BLINDER (U) (41/69)
 BLINDER G with KELTS/AS-5 ASM (photo) (45/69)
 BLINDER tail-defense radar and fire coverage (U) (diagram) (49/69)
 BLINDER/TU-22 supersonic-dash medium bomber (2 photos) (49/69)
 BISON C (U) (2 photos) (49/69)

Communist China

Communist China's military high command: The General Staff Department (U) (listing) (22/69)
 China's Cultural Revolution -- vignettes (U) (5 photos) (48/69)
 The Politburo of China's Communist Party (U) (listing) (48/69)

Cuba

Cuba's sugar output (U) (graph) (45/69)

Eastern Europe

Estimated strength and readiness of East European Warsaw Pact divisions (U) (table) (40/69)

Electronics (also see United States)

Long-range tropo antenna (U) (3 drawings) (27/69)
 TWIN DISH antenna for mobile tropospheric communications (tactical) (3 drawings) (27/69)
 Artist's concept of modified FAN SONG B (U) (drawing) (30/69)
 Modified FAN SONG B radar (U) (photo) (31/69)
 GUN DISH (U) (2 photos) (33/69)
 TRT ADD Soviet precision ABM target-tracking radar (2 photos) (34/69)
 Air defense missile antennas shocked Moskva hole cruiser also being installed aboard new KRESTA-Class cruiser (2 photos) (35/69)
 Ophieta transmitting/receiving antenna (U) (photo) (35/69)
 SSES Kumarov, showing COD EYE, possible Luneberg lens (3 photos) (36/69)
 SIDE NET heightfinder (U) (photo & drawing) (38/69)
 Soviet chaff drop recorded by AN/GSH-24 (U) (2 photos) (40/69)
 COKE/AN-24 transport intercepted by F-102s as recorded by AN/GSH-23 (U) (2 photos) (40/69)
 GATE POLE heightfinder radar (photo) (44/69)
 TILT FLOOD TV camera head (photo) (44/69)
 LOW BLOW, tracking and guidance radar for SA-3 SAM system (photo) (45/69)
 Antenna being installed at Novosibirsk to receive video from Soviet metants (U) (press photo) (46/69)
 FAN SONG with optical device atop horizontal antenna, North Vietnam (photo) (47/69)
 TOP SAIL 3-D radar of the Moskva (photo) (47/69)
 BLINDER/TU-22 supersonic-dash medium bomber (2 photos) (49/69)
 Characteristics of new Soviet jamming capability in VHF region (table) (50/69)

Fighters

FIGHTER (U) (photo) (35/69)
 FIGHTER A/SU-7 with 2 external fuel tanks and 2 rocket pods (U) (photo) (41/69)
 France's Mirage G (U) (photo and drawing) (50/69)

Helicopters

MI-4/ROUND helicopter with 57mm rocket pods (U) (photo) (32/69)
 HOMER and HEP (2 photos) (35/69)





Maps

AFRICA (also see Middle East, below)

- Communist and Nationalist Chinese representation (U) (27/69)
- Nigeria: Biafrans attack oil installations (U) (23/69)
- Ethiopia (U) (29/69)
- Zanzibar (U) (32/69)
- Ethiopia (U) (38/69)
- Sudan (formerly Anglo-Egyptian Sudan) (U) (41/69)
- ChiComs slate construction of TanZam railroad for early 1970 (U) (46/69)
- Tunisia (U) (47/69)
- Guinea: Soviets extend credit for development of Kindia bauxite (U) (50/69)

ANTARCTICA

- Antarctic stations (U) (33/69)

ASIA (also see USSR)

- South Vietnam (U) (27/69)
- Indian space program (U) (29/69)
- Burma (U) (29/69)
- China: Petroleum and petrochemical facilities (U) (42/69)
- Japan: Japanese, Soviets discuss joint thermal electric project (U) (42/69)
- Korea: S. Korean forces sink N. Korean agent boat (U) (43/69)
- Thailand: Areas of Communist activity (U) (47/69)
- South Vietnam: Administrative divisions (U) (51/69)
- Laos (U) (51/69)

EUROPE (also see USSR)

- Albania (U) (39/69)
- Yugoslavia (U) (51/69)

MIDDLE EAST

- Continued closure of Suez Canal accelerates development of over-land trade routes between Europe and Asia (U) (27/69)
- Tempo of incidents quickens along cease-fire lines (U) (28/69)
- Israeli-occupied areas of Arab lands (U) (48/69)

USSR (also see World Maps, below)

- Trans-Arctic tropospheric communication network (U) (27/69)
- Soviet Far East: Japanese and Soviets discuss joint thermal electric project (U) (42/69)
- The Trans-Siberian Railroad (U) (44/69)
- Soviets establish new military district on Chinese border (U) (47/69)
- Soviet SS-N-6 SLBM firing of 24 Nov 69 (U) (49/69)

WESTERN HEMISPHERE

- Guatemala (U) (42/69)
- New passenger air route between Cuba and Latin America may soon be available (U) (49/69)
- Guatemala: Guerrillas continue rural operations (U) (50/69)

WORLD

- Current Soviet acoustic research (U) (50/69)
- Example of area of potential information collection in Northern Hemisphere during single orbit of Cosmoses 250 and 269 (U) (51/69)

Middle East

- Egypt's air losses since June '67 war (U) (listing) (50/69)

Missile Firings

- Soviet missile/space launches (U) (listing): June 69 (28/69), July 69 (32/69), Aug 69 (37/69), Sep 29 (41/69), Oct 59 (46/69), Nov 29 (50/69)

Missiles (also see AAMs, ABMs, and SAMs)

- NANUCHKA-Class guided-missile patrol gunboat (U) (drawing) (29/69)
- SS-4/SANDAL (U) (press photo) (37/69)
- SS-X-6 (U) (photos) (38/69)
- SCAMP MRBM (U) (4 photos) (39/69)
- SAWFLY/SS-NX-3 naval-associated missile (U) (2 photos) (45/69)
- Missiles first displayed in Moscow parades, 1957-1969 (U) (listing) (47/69)
- SAWFLY (U) (drawing) (47/69)
- Soviet SS-N-6 SLBM launch of 24 Nov 69 (U) (map) (49/69)

North Vietnam

- Seaborne imports to North Vietnam (U) (graph) (43/69)
- Truck-laden Soviet merchant ship en route to NVN (U) (photo) (44/69)

Personalities

- Chou En-lai, Premier of People's Republic of China (U) (photo) (33/69)
- Albania's policy setters (Enver Hoxha, Mehmet Shehu, Behar Shylla) (U) (3 photos) (29/69)
- Fidel (Castro) in Cuba's same fields (U) (photo) (46/69)
- Tunisian leaders: Habib Bourguiba and Bahi Ladgham (U) (2 photos) (47/69)
- Communist China's Lin Biao (U) (photo) (48/69)
- Tito speaks on strikes - 27 August 1969 (U) (photo) (51/69)

Rockets

- FROGS 3, 5, 7 (U) (3 photos) (51/69)

Ships (also see Electronics and Submarines)

- NANUCHKA-Class guided-missile patrol gunboat (U) (drawing) (29/69)
- SSES Komarov, showing COD EYE, possible Luneberg lens (U) (3 photos) (36/69)

South Vietnam

- War Statistics (U) (graphs): (32/69, 37/69, 48/69, and 50/69)
- Monthly Chieu Hoi rates (U) (graph) (43/69)
- Viet Cong infrastructure ralliers (district level and above) Feb-Aug 69 (U) (graph) (43/69)
- Number of enemy-initiated attacks, by week, in 1969 (U) (graph) (43/69)
- Enemy-initiated attacks and incidents during 1969 "high points" and post-Tet offensive (U) (table) (43/69)
- Viet Cong linear shaped-charge demolitions (U) (2 photos) (44/69)

Space (General)

- Comparison of Soviet SL-12 propulsion system with US's 2-stage Saturn 1 (U) (drawing, list of performance parameters) (27/69)
- Proton 4 (U) (press photo) (32/69)
- Molniya course-correction engine (U) (2 photos) (33/69)
- Soyuz models (U) (1 photo; 1 drawing) (36/69)
- Zond 7 photos of Earth, Moon (U) (3 photos) (36/69)
- Zond 7 flight path and operations (U) (diagram) (36/69)
- SS-X-6 (U) (photo) (38/69)
- Interkosmos 1 (U) (press photo) (43/69)
- Antenna being installed at Novosibirsk to receive video from Soviet metsats (U) (press photo) (46/69)
- Interkosmos 1 being mated to carrier rocket upper stage (U) (2 photos) (46/69)
- Comparison of Soviet SL-12 propulsion system with US's 2-stage Saturn 1 (U) (diagram) (46/69)
- Example of area of potential information collection in northern hemisphere during single orbit of Cosmoses 250 and 269 (U) (world map) (51/69)

Space Listings

- Soviet lunar launch attempts (U) (time scale, listing) (30/69)
- SL-9/SL-12 space launches, mid-1965 through July 1969 (U) (listing, time scale) (31/69)
- Soviet navigation-aid satellites (1967-1969) (U) (listing) (34/69, 38/69)
- Soviet meteorological satellite chronology (U) (chart) (41/69)
- Navaid, surveillance, and unknown-mission satellites launched by the SL-3 propulsion system (U) (listing) (45/69)
- Launch record of SL-9/SL-12 space systems (U) (time scale, listing) (46/69)
- Navaid, surveillance and unknown-mission satellites launched by the SL-8 propulsion system (U) (listing) (49/69)

Surface-to-Air Missiles (SAMs)

- SA-2 warhead detonation over North Vietnam (U) (photo) (35/69)
- Fragmentation pattern, SA-2 warhead (U) (diagram) (35/69)
- GUIDELINE/SA-2 surface-to-air missile (U) (photo) (35/69)
- Fragmentation density, SA-2 warhead (U) (chart) (35/69)
- SA-3 (U) (drawing) (40/69)
- Standard SA-3/GOA air defense missile (U) (photo) (43/69)
- GOA/SA-3 with fins on interstage structure (U) (photo) (43/69)

Submarines

- H-III Class submarine (U) (drawing) (47/69)

Transport Aircraft

- TU-144 (U) (7 photos) (33/69)
- TU-144/CHARGER (U) (photo) (39/69)

USSR

- Average annual growth of factor productivity in USSR, US & Western Europe in 1950s and 1960s (U) (table) (23/69)
- Some partial indicators of relative levels of technological advancement in USSR, US & Western Europe in the mid-1960s (U) (table) (23/69)
- Growth rate declines in output of Soviet fuels (U) (graph) (31/69)
- Soviet gross industrial production in 1963, as a percentage of US production (a Soviet estimate) (U) (table) (37/69)
- Soviet industrial labor productivity in 1963, as a percentage of US labor productivity (a Soviet estimate) (U) (table) (37/69)
- Six-meter telescope, Leningrad, USSR (U) (photo) (39/69)
- TV tower in Moscow suburbs (U) (press photo) (39/69)
- Japanese and Soviets discuss joint thermal electric project (U) (map) (42/69)
- Current Soviet acoustic research (U) (world map) (50/69)
- TV tower at Ostakino, near Moscow (U) (press photo) (43/69)

United States

- Radar video-tape reproducer (AN/GSH-30) at readout and analysis center, Alaskan NORAD region (U) (2 photos) (43/69)
- AN/GSH-30 scope photos at various settings (U) (2 photos) (40/69)

