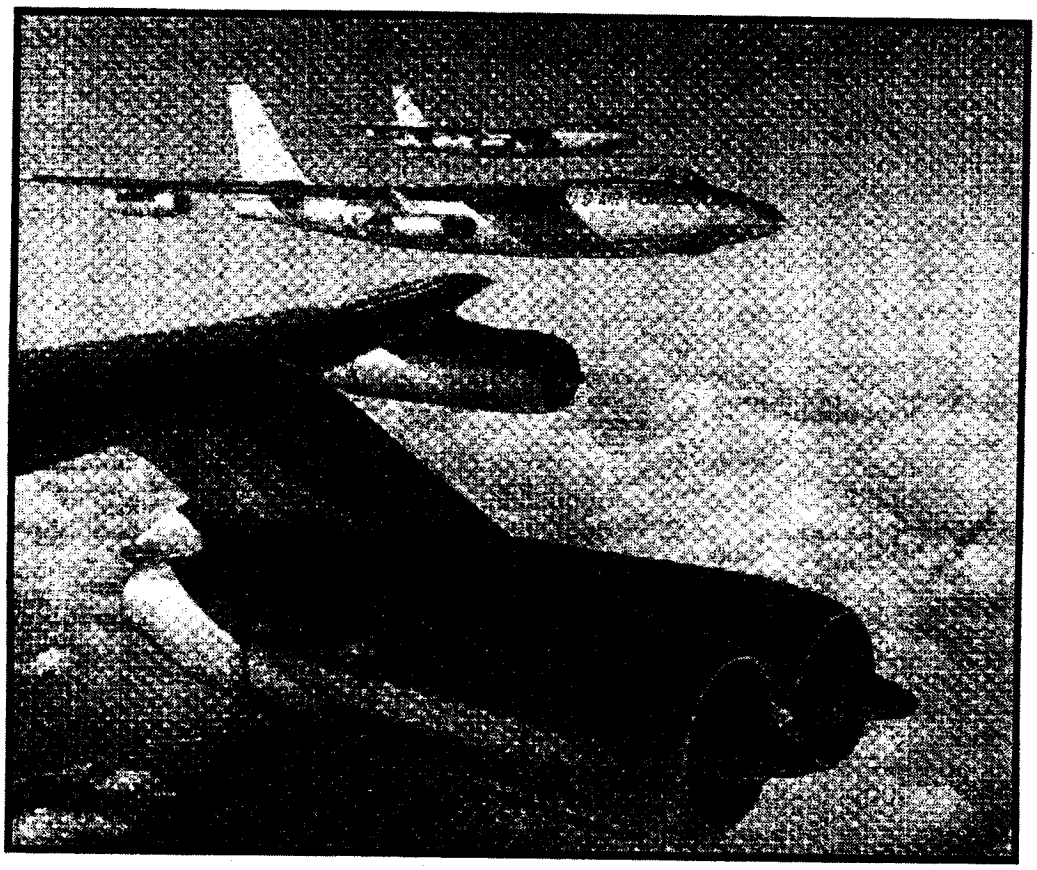
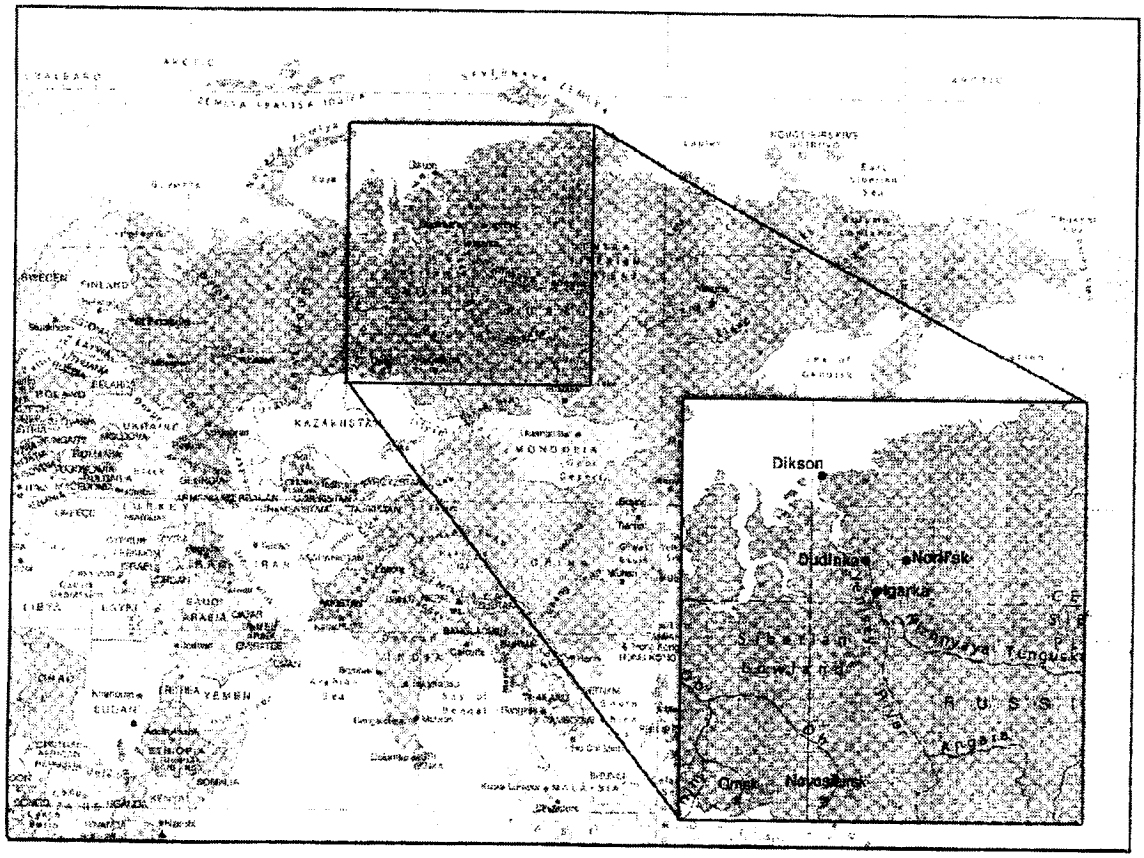
THE 14 APRIL 1956 OVERFLIGHT OF NORIL'SK, U.S.S.R.

R. Cargill Hall



Those familiar with the history of American intelligence operations know that United States leaders established the National Reconnaissance Office (NRO) in 1961 to consolidate in one organization all of the nation's "satellite and overflight reconnaissance projects." Many do not know, however, that the precursor of these covert overflight projects is traced to a once compartmented but now declassified Sensitive Intelligence (SENSINT) Program. President Dwight D. Eisenhower, today viewed as the "patron saint" of overhead reconnaissance, authorized this most secret peacetime overflight program sometime in the fall of 1953, shortly after hostilities ceased in the Korean conflict. U.S. theater commanders, the Joint Chiefs, and the Director of Central Intelligence (DCI) could request one or more of these special missions, while providing ample justification for taking the risk. The overflights were conducted by standard or specially modified military reconnaissance aircraft. The President's "Special Group"—consisting of his National Security Advisor, the Secretaries of State and Defense, the Chairman of the Joint Chiefs of Staff and the DCI—vetted all covert operations including SENSINT overflight requests, and President Eisenhower made the final decision. Eisenhower terminated the military-directed SENSINT Program in December 1956, shortly after the CIA's high-altitude U–2 aircraft began overflight operations.

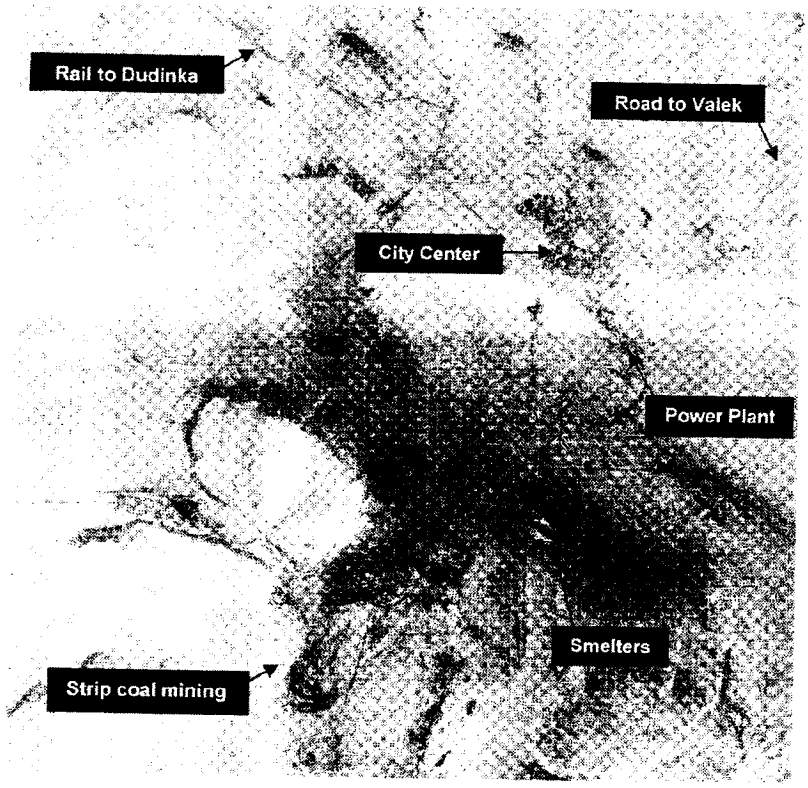
Of all the SENSINT missions, one of the most audacious and dangerous took place on 14 April 1956, when three Strategic Air Command (SAC) RB–47E photoreconnaissance bombers took off from Thule Air Base, Greenland, to find and photograph a Soviet metropolis that was known to exist but had never before been seen by westerners—the city of Noril'sk. Located east of the Ural Mountains and some 200 miles north of the Arctic Circle, Noril'sk had been founded as a slave labor camp, or gulag, in the mid-1930s by Soviet dictator Joseph Stalin who sought to exploit the rich nickel deposits nearby. The nickel products moved on a short rail line from Noril'sk to the town of Dudinka on the Yenisey River. There, loaded on board ocean transports during the summer months, they were shipped north on the Yenisey to the Kara Sea and then west to ports like Murmansk on the Kola Peninsula. By 1956 Noril'sk had become (and remains today) the largest nickel producer in the world. Its Kremlin masters declared the site a strategic asset, off limits to all but Communist officials and those who worked in its mines and smelters. In fact, travel to remote, frigid Noril'sk is still restricted, a point underscored in a recent article in *The Washington Post*.



All three of the three-man SAC aircrews* that launched into Greenland's sub-zero Polar air in April 1956 knew nothing of these things. For them, Noril'sk was just a name and a set of coordinates on a map, a site to be imaged while operating at highest altitude and maximum speed. Though SENSINT aircrews would not speak of these missions for the next forty-five years, they remembered well their flight instructions: "One pass and haul ass!"—out of "denied territory." The seemingly endless winter darkness that enveloped Noril'sk had just begun to lift with the vernal equinox a few weeks before. Now the sun marched northward each day toward equally unending daylight and a brief summer. SAC meteorologists forecast excellent weather in northern Russia on 14 April, and mission planners called for the RB–47Es to arrive over Noril'sk just after noon, local time, when the sun angle in the far north would cast long shadows in the snow, permitting precise calculation of building sizes, shapes, and heights.

*SAC's legendary reconnaissance pilot John Lappo piloted the lead aircraft, with Dyle Channel co-pilot and Harry Wolfe navigator. Charles "Bud" Mundy commanded the second aircraft with Howard Adams co-pilot and Ronald Whitely navigator. Franklin Roll piloted the third RB-47E, crewmembers unknown.

Flying in close formation and operating in complete radio silence, the RB–47Es rendezvoused with KC–97 aerial tankers over the North Pole and took on full loads of JP-4 jet fuel.* The airplanes crossed the Kara Sea and coasted into Soviet territory over the Taymyr Peninsula, well east of the Yenisey River and the Soviet air base that straddled its mouth at Dikson. Carefully avoiding an altitude at which contrails would form, their cockpit-warning devices indicated that Soviet radars had not detected their presence. Cruising at 40,000 feet and at nearly full throttle, the SAC aircrews found and photographed for the first time the city of Noril'sk, then swung south on the Yenisey River to image the town of Igarka and turned north to capture on film Noril'sk's port of Dudinka. Turning northeast once more, away from the Yenisey, they exited Soviet airspace at their approximate point of entry.

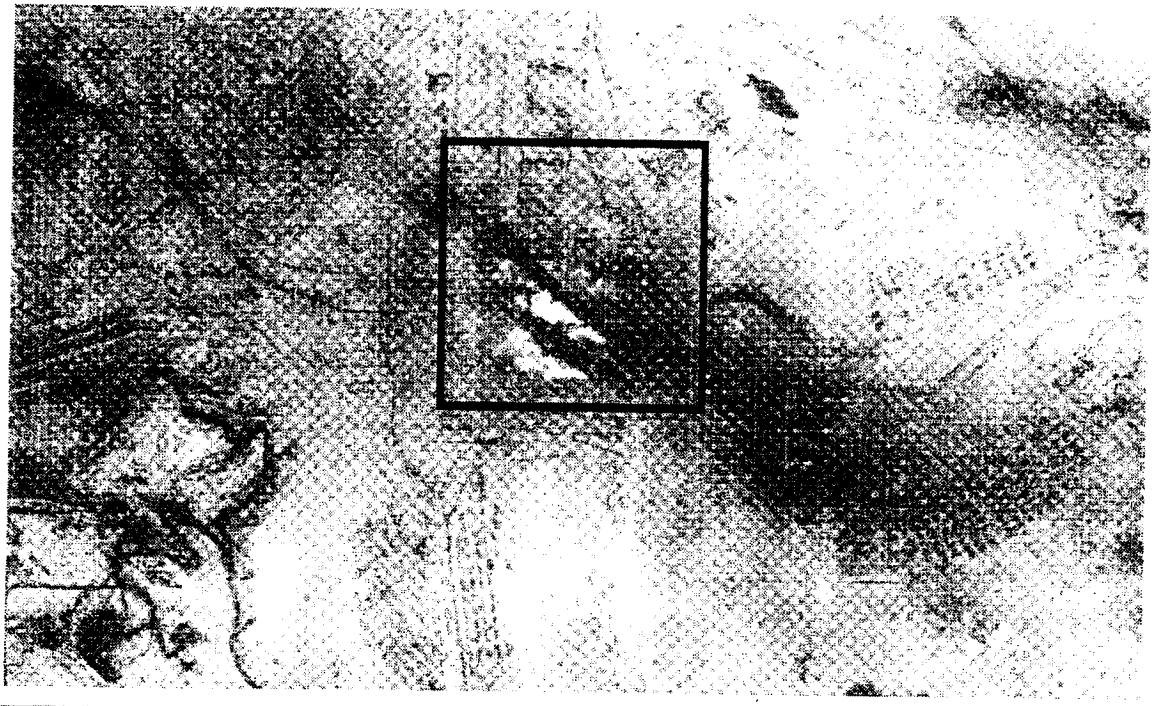


Noril'sk imaged during a SENSINT mission on 14 April 1956 using the 6-inch focal length vertical camera mounted in a RB-47E.

As the three aircraft and their precious cargo of exposed film neared the North Pole, they rendezvoused once more with KC–97s for another refueling—enough, mission planners had determined, to return them safely to Greenland. But, now running late against schedule, the RB–47Es encountered unexpected headwinds on the return leg over the North Pole, and their time of arrival in Greenland came and went. Forty-five minutes passed. In the control tower at Thule Air

*The KC-97s also operated in complete radio silence, but each mounted an electronic beacon that the reconnaissance bomber radars could home on and follow until the tankers were sighted visually.

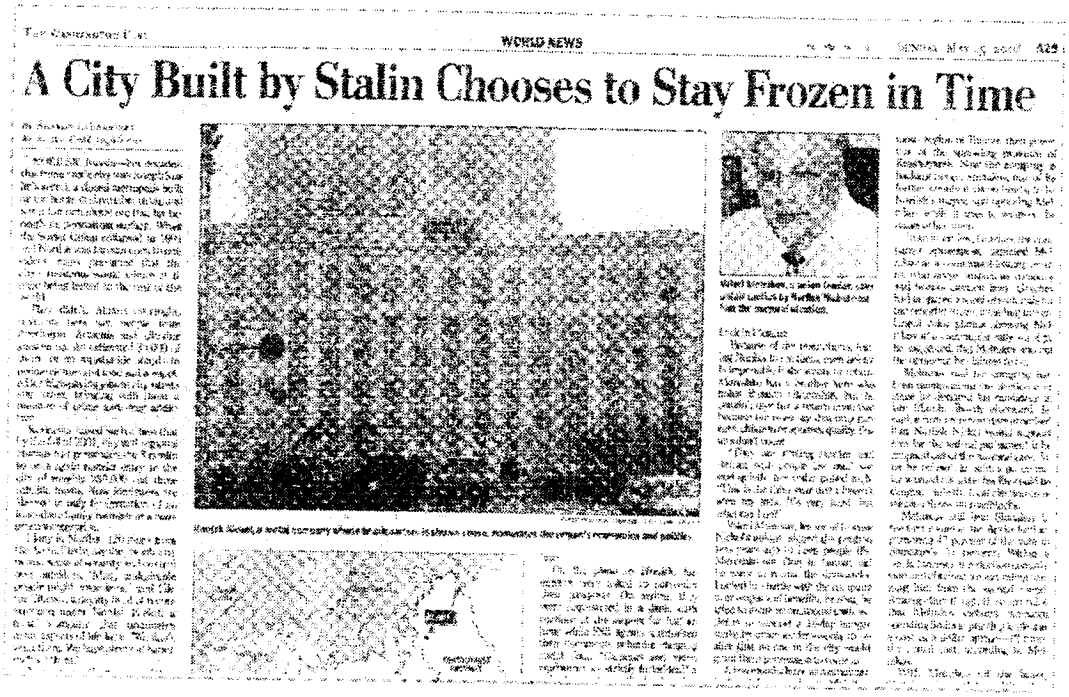
Base, anxious planners finally broke radio silence. Using the lead aircraft's call sign, Lloyd Fields, Lappo's squadron commander, asked him to report how much fuel he had remaining. The welcome if disquieting radioed reply was a laconic: "Enough!" A few minutes later, one after another, the reconnaissance bombers touched down on Thule's 10,000-foot runway, their fuel tanks nearly empty, their fuel reserves far below the Strategic Air Command prescribed minimum at landing.



Noril'sk's smelters imaged by a 36-inch focal length vertical camera mounted in a RB-47E. A close-up of the smelters appears at left. Note the elongated shadows cast by the smelter smoke stacks. Based on the smoke plumes and distribution of soot and ash that can be seen in the picture on the facing page, the wind at the surface on 14 April 1956 was blowing in the opposite direction to the local prevailing winds.

Once on the ground, the aircrews were escorted to a secure room at base operations and debriefed. A specially cleared photographic team at Thule developed the film from the bombers' reconnaissance cameras. Afterward, the original negatives and their copies were flown directly to SAC headquarters in Omaha, Nebraska, and to CIA headquarters at 2430 E Street, N.W., in Washington, D.C. The aircrews that took the images of mysterious Noril'sk did not possess the clearances to see them. But you will see in the accompanying photos some of the nearly 50-year-old images of that remote city—a city and its inhabitants fixed on film at one moment in time. Smoke from the enormous chimneys at the coal-fired smelters hangs motionless in the frosty air of 14 April 1956. Even the headquarters building of Noril'sk Nickel, built in the early 1950s at the city's center, can be identified. For the U.S. Intelligence Community and the nation's leaders, this and other SENSINT overflight missions marked an important step in revealing the industrial and military secrets of the Soviet Union.*

*The most complete accounting of the SENSINT Program currently available is contained in R. Cargill Hall and Clayton D. Laurie, eds., *Early Cold War Overflights, Symposium Proceedings, Volume I: Memoirs*, and *Volume II: Appendixes* (National Reconnaissance Office, Washington, D.C. 2003).

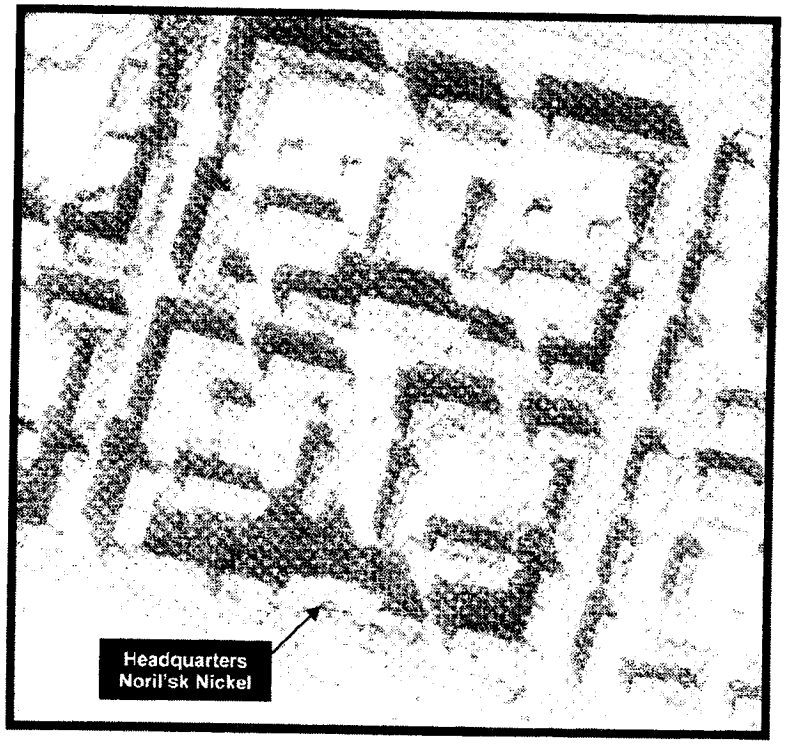


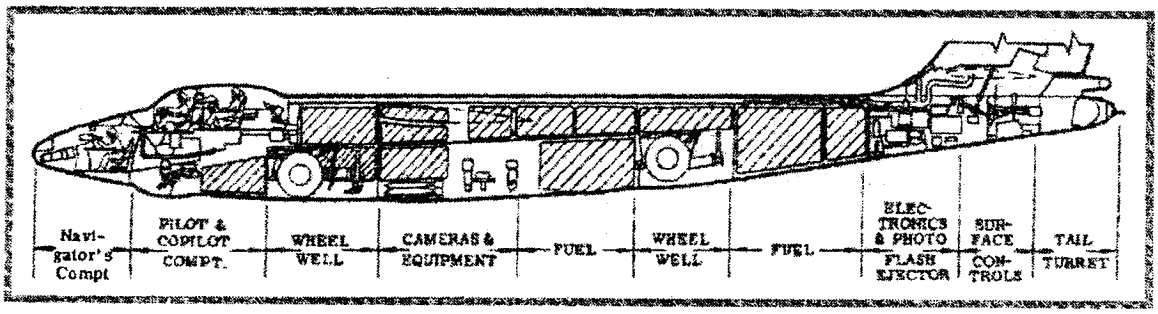
WORLD NEWS

A City Built by Stalin Chooses to Stay Frozen in Time

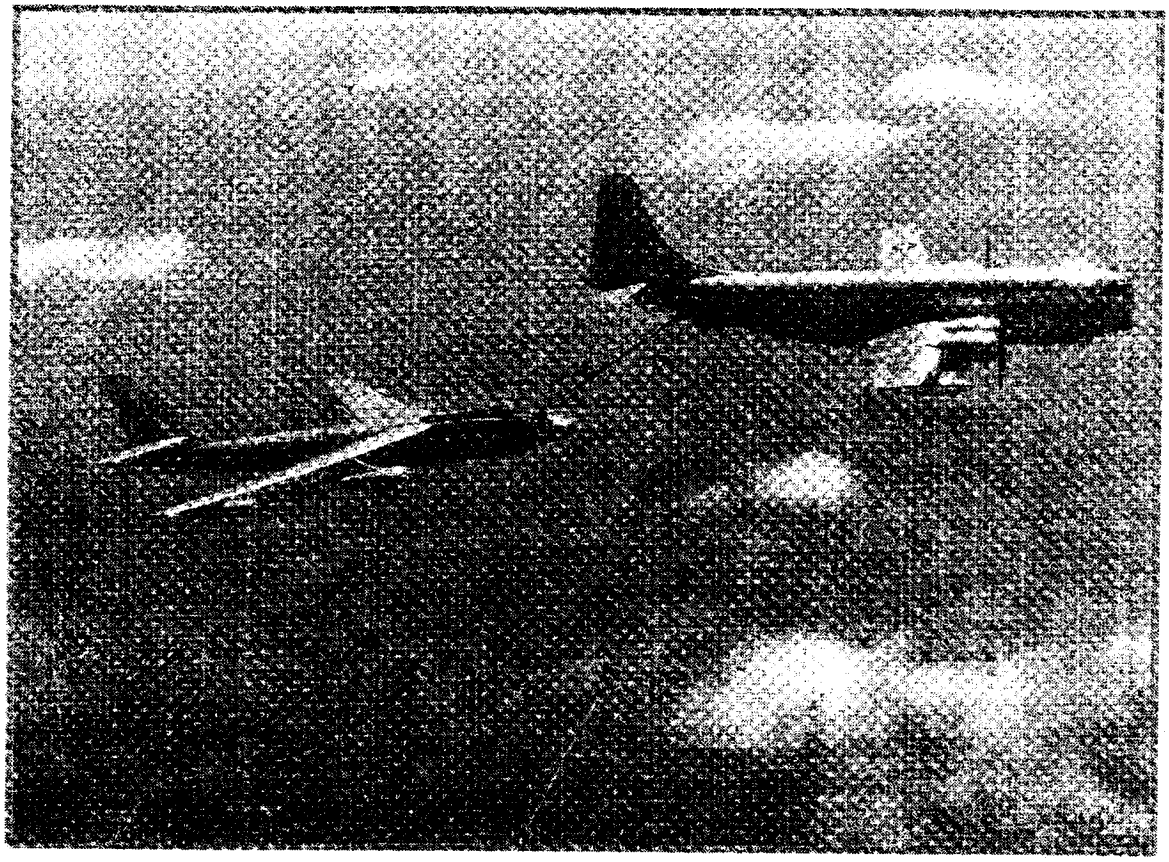
The headquarters building of Noril'sk Nickel, pictured above on 25 May 2003, was built in the early 1950s and is identified in the overflight image below. The multistoried office complex behind the headquarters was constructed later in the 20th century.

Taken by a 36-inch focal length vertical camera, the image on the facing page captured the city center of Noril'sk and its electric power plant. A portion of the city at top left has yet to be finished. The electric plant's cooling pipes can be seen extending into the frozen lake at left center, from which steam emerges along the line discharging heated water. The inset enlargement on this page shows the city center in greater detail. The headquarters of Noril'sk Nickel can be identified by its shadow.





RB–47E Inboard Profile



Aerial Refueling of RB–47 reconnaissance bombers by KC–97 tankers made possible deep penetration overflights of the Soviet Union.

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