

## ***FROM THE PAST: A LOOK AT NRO HISTORY***

### **The First Reconnaissance Overflights of the Soviet Union**

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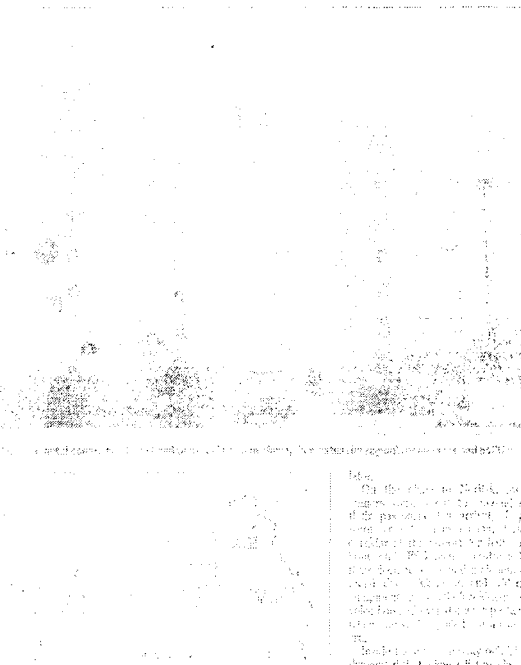
Most of us who work at the NRO, regardless of our federal agency or contractor service of assignment, know that United States leaders established the National Reconnaissance Office in 1961 to consolidate in one organization all of the nation's "satellite and overflight reconnaissance projects." Many do not know, however, that the genesis of these overflight projects resides in 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 overflight program in the fall of 1953, shortly after hostilities ceased in the Korean War. U. S. theater commanders, the Joint Chiefs, and the Director of Central Intelligence (DCI) could request one or more of these special missions, which 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 missions.

Of all the SENSINT missions, one of the most audacious and dangerous took place on 14 April 1956, when a Strategic Air Command (SAC) RB-47E photoreconnaissance bomber took off from Thule Air Base, Greenland, to find and photograph a Soviet metropolis known to exist, but never before seen by westerners—the city of Noril'sk. Located behind the Ural Mountains, just south of the Arctic Circle near the Yenisey River, 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*.

# A City Built by Stalin Chooses to Stay Frozen in Time

NORIL'SK, Russia (AP) — In the heart of Siberia, a city built by Stalin's order has chosen to stay frozen in time. The city, Noril'sk, is one of the most remote and frigid in the world. It is a city of 100,000 people, built in the early 1950s. The city is 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*.



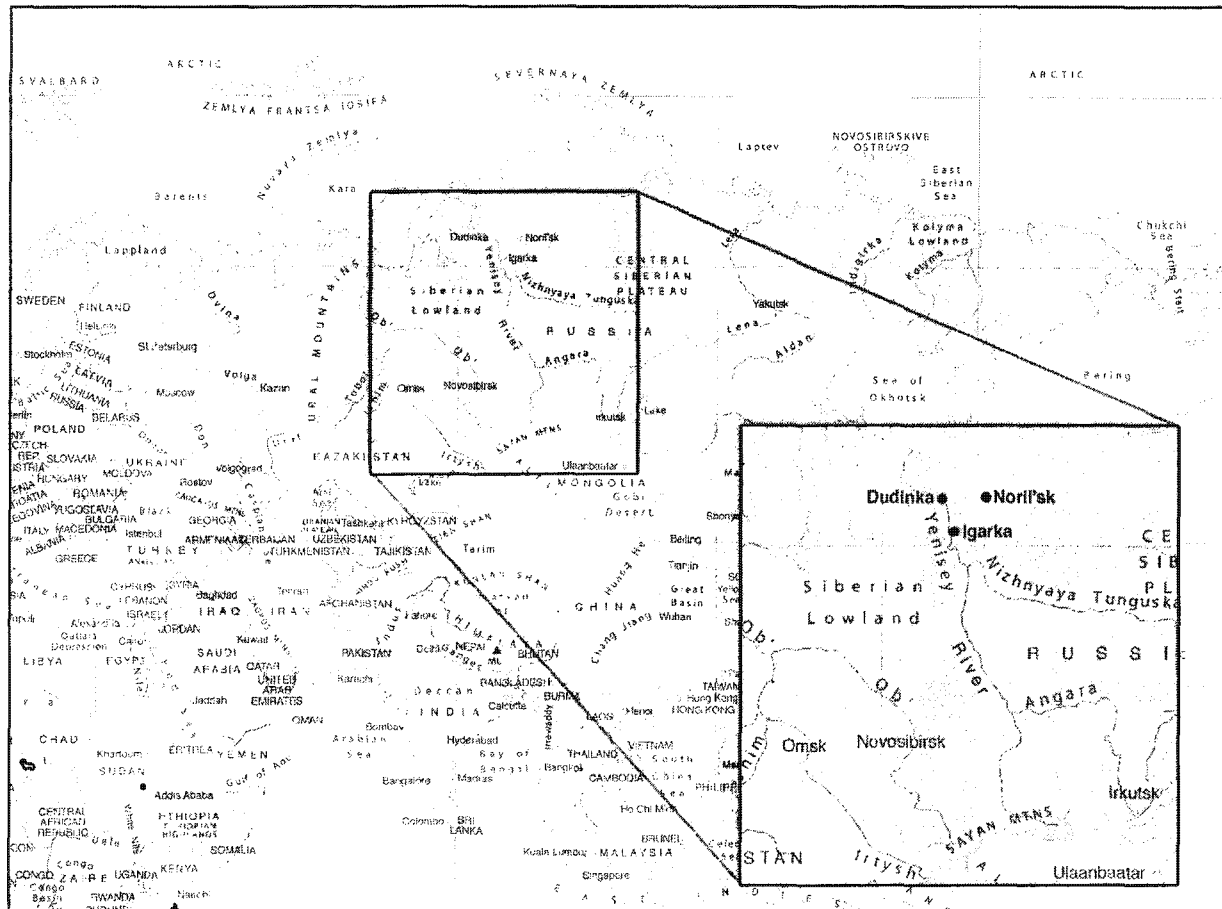
Overflight photo of Noril'sk, a city built by Stalin's order, was built in the early 1950s.

...of the possible removal of the company. The company is looking for a new leader, one of the former Soviet leaders, to take over the company and running the city. The city is 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*.

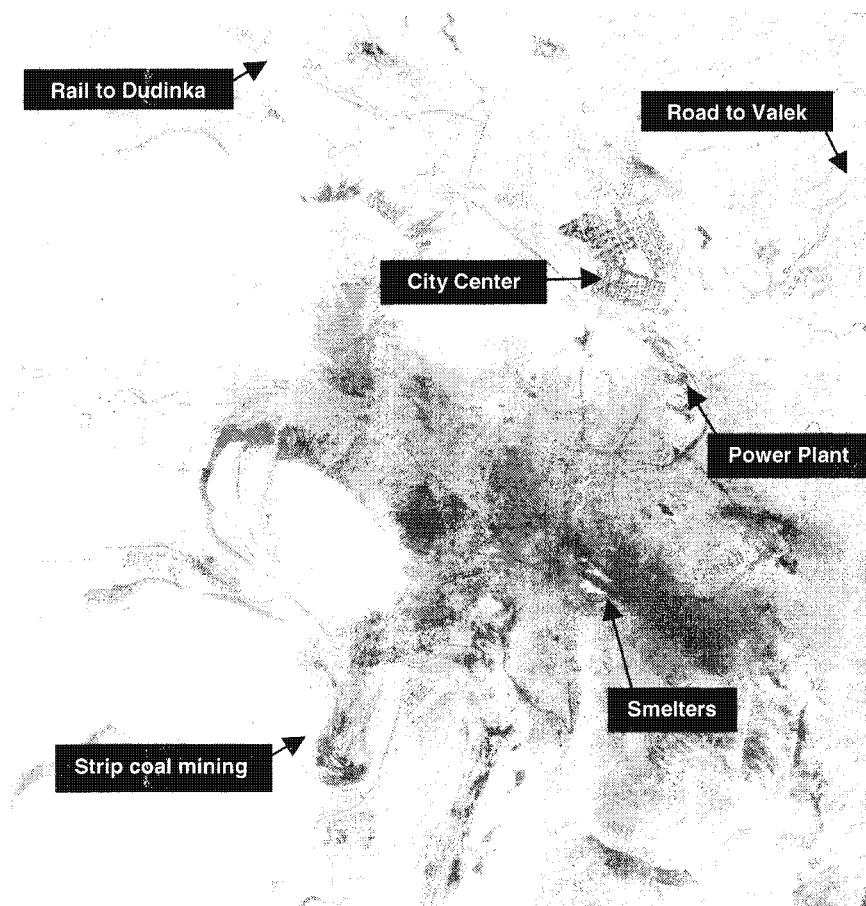
The headquarters building of Noril'sk Nickel, pictured above, was built in the early 1950s and is identified in an overflight image at the end of this article. The multistoried office complex behind the headquarters was constructed later in the 20<sup>th</sup> century.

The three-man SAC aircrew that launched into the 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." Three months of unending winter darkness that enveloped Noril'sk had just lifted with the vernal equinox a few weeks before. Now, the Sun marched each day toward equally unending summertime daylight. SAC meteorologists forecast excellent weather in northern Russia on 14 April, and mission

planners called for the RB-47E 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.



Operating in complete radio silence, the RB-47E rendezvoused with a KC-97 aerial tanker over the North Pole and took on a full load of JP-4 jet fuel—enough, mission planners had determined, to complete the overflight and return safely to Greenland. The airplane crossed the Kara Sea and coasted into Soviet territory near the mouth of the Yenisey River, carefully avoiding an altitude at which contrails would form. A cockpit-warning device indicated that Soviet radar had not detected their presence. Cruising at 40,000 feet and at nearly full throttle, the SAC aircrew found and photographed for the first time the city of Noril'sk, then swung south to image the town of Igarka and turned north to capture on film Noril'sk's port of Dudinka. But the RB-47E encountered unexpected headwinds on the return leg over the North Pole, and its time of arrival in Greenland came and went. Forty-five minutes passed. In the control tower at Thule Air Base, anxious mission planners finally broke radio silence and, using the aircraft's call



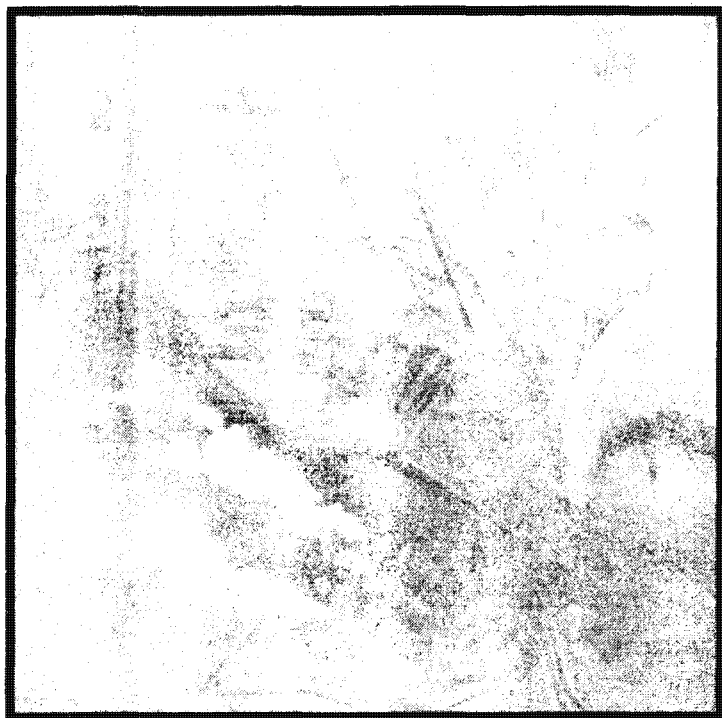
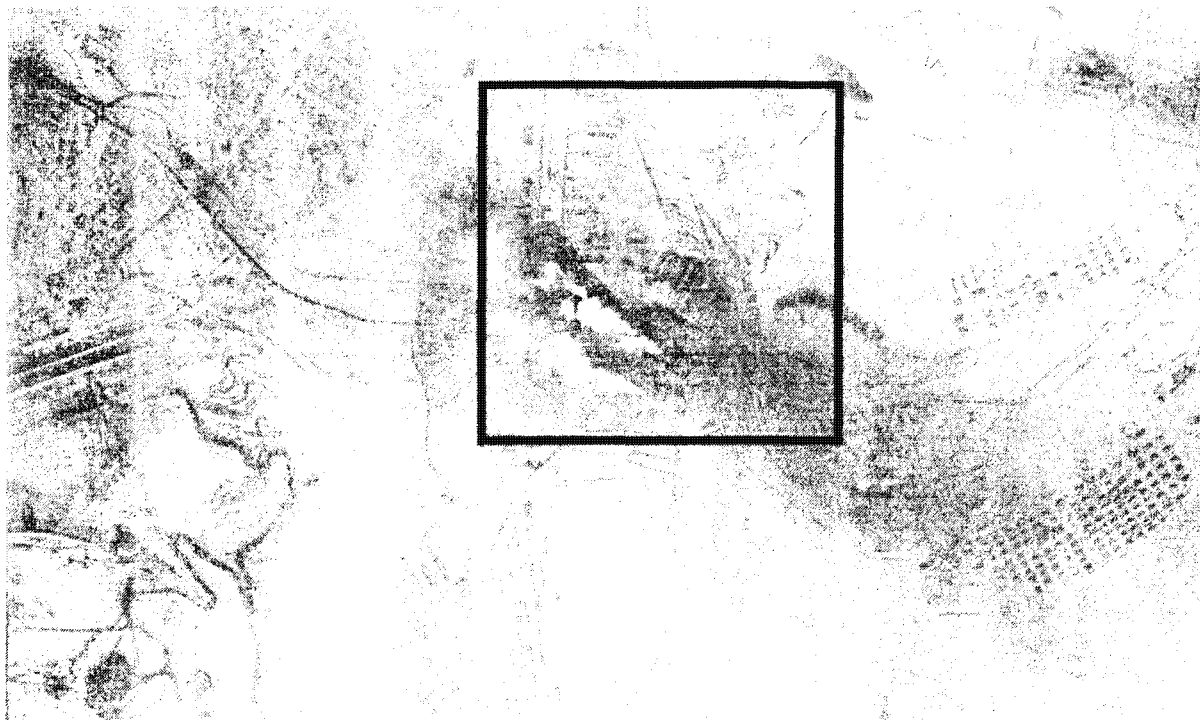
**Noril'sk imaged during a SENSINT mission on 14 April 1956 using the 6-inch focal length vertical camera mounted in the RB-47E.**

sign, asked its commander to advise them how much fuel he had remaining. The welcome, albeit disturbing, radioed reply was a laconic: "Enough!" A few minutes later the reconnaissance bomber touched down on Thule's 10,000-foot runway, its fuel tanks nearly empty, its fuel reserves far below the Strategic Air Command prescribed minimum at landing. (The daring aircraft commander on

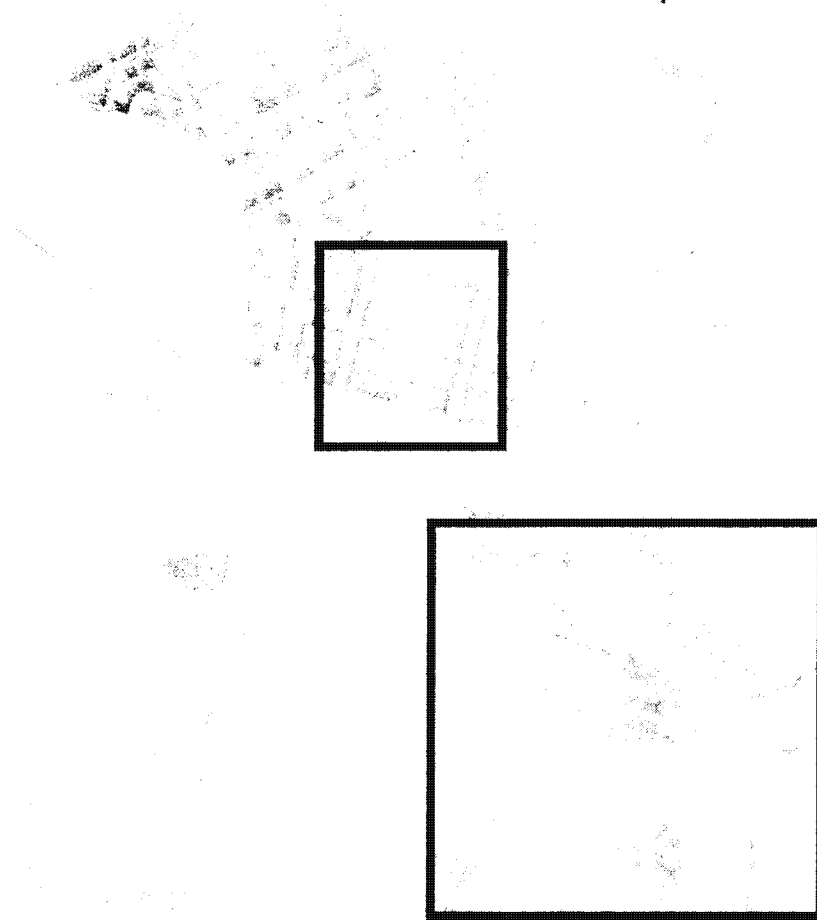
this SENSINT mission is believed to have been SAC's legendary bomber pilot, John Lappo.) Whether SAC's Commander in Chief, General Curtis E. LeMay, ever learned of this gross violation of command flight procedures is not recorded.

Whoever was at the controls, the aircrew was escorted to a secure room at base operations and debriefed. A specially cleared photographic team at Thule developed the film from the 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 aircrew that took the images of mysterious Noril'sk did not possess the clearances to see them. But you will see below 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

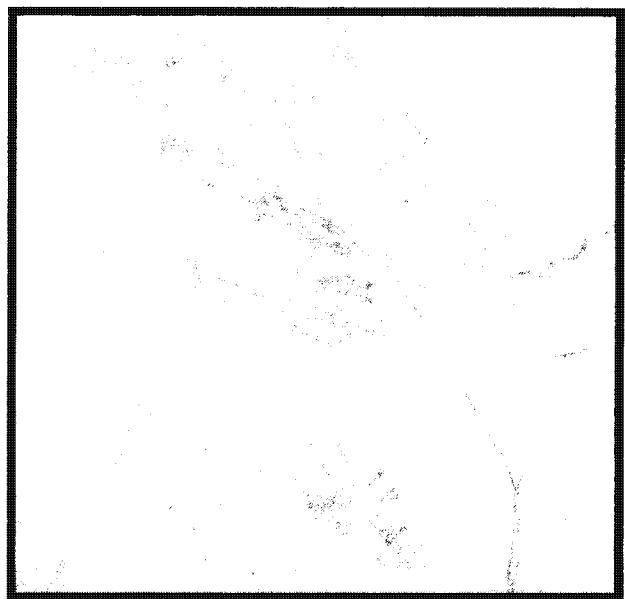
the city's center, can be identified. For the U.S. Intelligence Community and the nation's leaders, this and other SENSINT overflight missions marked the first step toward revealing the industrial and military secrets of the Soviet Union.

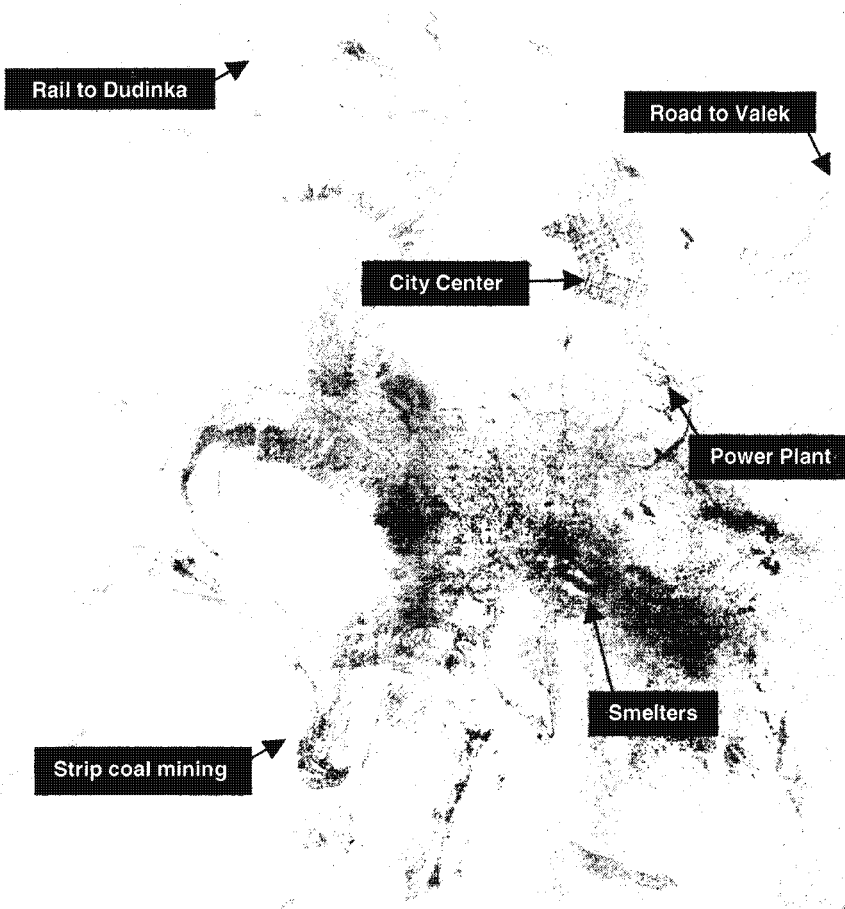


**Noril'sk imaged by a 36-inch focal length oblique camera mounted in the RB-47E. A close-up of the smelters in Noril'sk appears at left. Note the elongated shadows cast by the smelter smoke stacks. Based on the smoke plumes and the distribution of soot and ash that can be seen in the picture on the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



Taken by a 36-inch focal length oblique camera, the image at left captured the city center of Noril'sk and its electric power plant. The 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 enlargements below show the power plant and city center in greater detail. The headquarters of Noril'sk Nickel can be identified by its shadow.





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