

**TOP SECRET**

17 July 1956

**MEMORANDUM FOR:** Project Director

**SUBJECT** : Suggestions re the Intelligence Value of  
AQUATONE

In balancing the value in intelligence returns potentially available from AQUATONE operations against the possible damage to U. S. international relations, it is important to consider these returns in their proper light. First, it is of utmost importance to differentiate in our minds, and to cause the Russians to differentiate in theirs, between AQUATONE-type operations and reconnaissance by military aircraft. As a covert intelligence operation AQUATONE has merely substituted high altitude vehicles and precision observation and memory equipment for more prosaic modes of transportation and the eyes and memory of an agent. The operation is intended and designed to provide the U. S. with an understanding of the capabilities of the Soviet Union, its current intentions, and its long range objectives. AQUATONE operations are not intended to be the counterpart of the target-spotting function of military reconnaissance which is an immediate prelude to hostilities.

The second important aspect of the results of AQUATONE operations which must be considered stems from the objectives just stated. The length of the missions that can be carried out inside the USSR, the wide variety of areas and subject matter that can be covered in any one sortie, make the AQUATONE intelligence system one which is capable of studying a culture rather than one solely designed to cover specific targets.

There can be no doubt of the value in terms of our national security of the photographic coverage obtained on 4 July 1956 of five of the seven highest priority targets specified by the USAF. This mission was indeed timely in that it revealed no heavy jet bombers at any of the five bases covered, even though current intelligence estimates dictated the presence of regiments of such bombers at at least two of these five bases. There can also be no doubt that the coverage obtained at Leningrad during the same mission was of great importance to the Navy and covered some of its highest

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priority intelligence targets. The new ways at at least one submarine yard, the fitting of an additional cruiser of the Sverdlov class (possibly for missiles), as well as the location and size of military port installations were certainly useful if not essential in preparing estimates of Soviet naval capabilities. Likewise, the Army installation at Bykhov and the associated training grounds in the vicinity was important new information for G-2. The northern shore line from Leningrad westward and southward can fill a current critical need in connection with the determination of potential amphibious landings on Russian soil in the event of war.

But a full review of the 4 July mission yields results of much greater significance than these so called "highest priorities" intelligence targets. For the first time we are really able to say that we have an understanding of much that was going on in the Soviet Union on 4 July 1956. This understanding comes from observation and knowledge which even a person unskilled in the photo-interpretation art can achieve. We are no longer dependent on an "estimate" or a "judgment" or an "assessment" of what the situation is. We now have a cross section of a part of the entire Soviet way of life for that date -- their military installations, their farms, their irrigation systems, their factories, their power systems to feed the factories, their housing for the people who run the factories, their recreation, their railroads and the amount of traffic they carry, their scientific accomplishment at least in the field of electronics, the port activities for both civilian and military persons in Leningrad and other ports on the Baltic. We know that even though innumerable radar signals were detected and recorded by the electronic system carried on the mission, fighter aircraft at the five most important bases covered were drawn up in orderly rows as if for formal inspection on parade. The medium jet bombers located at the bases were also neatly aligned and not even dispersed to on-field dispersal areas. We know that the guns in the anti-aircraft batteries sighted were in a horizontal position rather than pointed upwards and "on the ready". We know that some harvests were being brought in and that small truck gardens were being worked. These are but a few examples of the many things which tend to spell out the real intentions, objectives and qualities of the Soviet Union that we must fully understand and appreciate if we are to be successful in negotiating a lasting peace for the world.

It may well be that the absence of heavy bombers from the bases covered during this first and subsequent missions only means that the estimated number of bombers might still be correct but that the bombers are stationed elsewhere at installations yet to be discovered. It may well also be that the failure of fighter aircraft at the many fields overflowed to

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scramble to seek out the intruder and the failure of the anti-aircraft guns to rise to the ready is an expression of strength on the part of the Russians -- strength borne of knowledge of what we are up to. It may also well be that the other specific indicators of military capability which we might search out in the photography obtained could be used to cast doubt on the understanding we are seeking to accomplish. But these alternatives appear to have doubtful validity. While we must grant that, in the week of operations permitted to AQUATONE, only a relatively small area of the Soviet Union and, therefore, a relatively small part of their culture was examined, the sampling appears to be good. Broad coverage of the order of 400,000 square miles was obtained -- possibly as much as 15,000 square miles of detailed coverage was accomplished. Even though all of this area was in the portions of Russia we should know most about from other sources of intelligence, many new discoveries have come to light. Airfields previously unknown, army training bases previously unknown, industrial complexes of a size heretofore unsuspected were revealed, and so on down through a long list of various types of significant activities. More than 130 airfields can be identified inside the Soviet Union and more than 60 urban areas can be examined from photographs now available from AQUATONE. Yet there is a huge area included in the Urals and beyond about which we know even less from other intelligence sources and which may really hold the key to the understanding of the Soviet Union that we seek.

To bar the United States from reaching this understanding through overflights of the critical regions of the Urals and eastward could well be tragic. Five operational missions have already proven that many of our guesses on important subjects can be seriously wrong, that the estimates which form the basis for national policy can be projections from wrong guesses and that, as a consequence, our policy can indeed be bankrupt. In this light, the danger to our international relations appears to be far greater if we do not carry out the AQUATONE plan than if we do carry it out, having laid sufficient ground work to assure that the interpretation of the activities is as an intelligence operation rather than as a reconnaissance prelude to hostilities.

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