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SC-06595-56 Series A 25X1

**INTRUDER FLIGHTS OVER THE USSR DURING JULY 1956****I. INTRODUCTION**

1. On 4th, 5th, 7th, 9th and 10th July 1956 a number of aircraft made daylight intruder flights over the western USSR. These flights were tracked by the Soviet air warning organization with varying accuracy and continuity. There was very little evidence of any fighter activity which they may have stimulated.

2. The maps appended to this report show separately each day's intruder flights and any other tracks which were reported by the Soviet air warning organization at about the same time and in the same area as the intruding aircraft. All times are given in MOSCOW time (Z plus 3). The following paragraphs provide a commentary on these maps and include information obtained from voice interception in GERMANY. Fighter code messages relating to the intruder tracks were intercepted on only one ground/ground net, once only on one Air Situation Broadcast and not at all on PVO Command links.

3. This dearth of fighter code traffic on ground/ground nets has been noted before during large exercises when there must in fact have been a great deal of fighter interception activity. It can only be attributed to the widespread use of land line.

4. Some estimate of the height and speed of the intruders can be made from the traffic available although soviet height-finding, even on familiar targets at familiar heights, is notoriously inaccurate. During these flights estimates ranging from 15,000 to 20,000 metres were, however, frequent enough to suggest that the true height of the targets must have been somewhere within this range. The calculation of ground speed from Soviet radar plots is also liable to be inaccurate, but at no time did the speed of the intruders appear to have been above about 420 knots.

**4th JULY**

5. The intruder track on 4th of July began near HALLE and continued east north-eastwards across POLAND into the USSR, passing north of BARANOVICHI, turning north-west when shot of BOBRUJSK and then returning over MINSK, VILNA, NORTH of KALININGRAD, along the BALTIC Coast as far as SWINOUJSCIE and then across northern GERMANY. The speed of the aircraft computed from the Soviet plotting would have been about 420 knots and the height estimates reported began at 7,000 metres and rose to 15,700 metres near MINSK, falling again to 11,000 metres over North GERMANY at the end of the track. Nearly four hours were spent over Soviet-Controlled territory.

**6. Fighter activity from Voice traffic**

A pair of fighter aircraft, suffixes 488 and 490 of Regiment A<sup>A</sup> Fighter Division TO104 (FINOW) were patrolling at a height of 12,000 metres in the vicinity of base between 1112 and 1135 whilst the target aircraft was still over Northern POLAND and the sea. At 1135 they were instructed by Northern Fighter Corps HQ to fly on course 50° or 60° (the traffic was garbled) for eight minutes.

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Between 1143 and 1156 as the target aircraft entered Eastern GERMANY the fighters were given successive vectors of 90°, 150°, possibly 350° and 220° but the leader reported at 1156 that he still could not see the target, and the fighters returned to base.

7. It is not all all certain that these fighters were being vectored on to track 4513. The vectors, if they were intercepted reliably, would have take the fighters well into POLAND by the time the target aircraft crossed the BALTIC coast into GERMANY.

8. It is unlikely that either of the tracks (5607 and 9795) plotted in the vicinity of the intruder track at this time represents this pair of aircraft; nevertheless, although the tracks were not given a precise description in the air warning traffic, they do appear to be of fighter aircraft. Tracks 7887 and 5604 probably also represent attempted interceptions. No fighter tracks over RUSSIA were reported by the air warning organization.

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ascent and remained throughout the flight. He was still able to see through it in the vertical position however. As this effect has been consistent on recent missions, a TWX was sent to the manufacturer asking for a solution to the problem.

The film was not trackable from Homeplate to 5311N2050E. At this point the track was found to be 14 miles North of course. The track crossed the city of Bialystack just below check point "C". The remainder of the mission was flown within a five mile limit of the course line with the following exceptions:

- a. Eight miles off between points "C" and "D".
- b. Ten miles off between points "Q" and "R".
- c. Six miles off on turn point at "S".

Poor weather precluded plotting of flight line from 5554N2110E to 5437N1656E, and from 5318N to Homeplate. Coverage of route was estimated to be between 60 and 70 percent.

Three hours and forty-five minutes after take-off the electronics system showed evidence of new-type signal. It was a rapid-scan two blips per-second every second unsymmetrical. The sounds appear to be that of a rapid-scan height-finder. The "tinkling-bell" signal was also heard again at take-off plus 2:53 hours. The recorder motor stalled after 5:30 hours and did not start again. This was caused by an excessively dirty commutator. This item has been added to the pre-flight check list to preclude recurrences.

During the mission [ ] made two sun shots, which he felt were very poor, on the way home. He knew his actual position at the time so that it could be determined he was actually 35 miles and 25 miles off respectively on the two LOPS. Both spots placed him too close to the sub-solar point. This degree of accuracy, while not the best obtained, is thought to be not unreasonable, and consistent with the general requirements of the instrument. Further shots will be correlated by sextant number and by [ ] name to see if systematic errors are present, either in instruments or in use by individual [ ]

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Supply support is building up slowly. FAK is reported on its way here. Commercial air to [ ] was utilized for badly needed replacement of a component last week. Time from request to receipt was two days, allowing installation time. Had the component not arrived, the sextant would have been usable but much less accurate during current operations.

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Until supply strength increases, it is requested that channels other than [ ] be allowed for shipment of components. Entire instruments will be shipped only via [ ] channels or messenger.

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25X1PROBLEM AREAS

1. The most critical operational problems to be encountered to date.

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concern the operation of the [ ] engine at the temperatures being encountered at altitudes on the operational missions. The temperatures being experienced at altitudes have been ranging from -43 degrees to -51 degrees. These temperatures are considerable warmer than those encountered in the [ ] operations. These higher temperatures have adversely affected the operations of the [ ] in the following three areas: (1) decreases the operational altitudes by several thousand feet, (2) increases the fuel consumption (1205 gals in 8 hours on mission 2014) and (3) increases the probability of a [ ]. This information is being sent to [ ] and the Hartford Office by the [ ] representatives on location. New curves for fuel consumption and operations limits are being prepared by the [ ] representatives at [ ] and will be completed as soon as additional information becomes available. As the result of this new phenomenon it is recommended that a temperature measuring instrument be made available to the [ ] to indicate to him the engine inlet compressor temperatures so that he can control his altitude to keep within the operation envelope thereby preventing a [ ] will probably help in this area.

2. [ ] has continually been plagued with the problem of moisture in the equipment bay in all of our operations in [ ] and [ ]. Water condensation in the equipment bay is most serious. Mission 2010 [ ] malfunctioned as the result of this moisture condensation in the equipment bay. As much as a cupful of water collects in the camera windows during flight and all equipment is heavily covered with moisture upon landing. [ ] recommended upon the conclusion of its USCM that a heater-blower system for the equipment bay be designed to prevent this difficulty we knew would be encountered in this geographical area. [ ] has been requested to look into this problem and determine if such an item may not be procurable off the shelf. Also if this recommendation is considered it is suggested that [ ] be given the problem to come up with a piece of hardware to keep the equipment bay dry during flight.

3. It was suggested to [ ] during his last visit here that more target information be included in the Ops Order or in any other manner for use by the unit in better briefing [ ] on their missions. This information would be a list of the targets by type, i.e., airfield, city, type of factory, etc. With maps as poor as they are in the area of operations, any additional information such as the above will help the [ ] fly his mission.

4. On every flight to date, the viewfinder has been fogging up to the degree that the lateral and full forward and aft positions of the viewfinder travel cannot be utilized. The nitrogen purging has not been effective in eliminating this problem. Details have been forwarded to [ ] for their information and action to see if a fix can be devised for the elimination of this fogging problem.

5. In accordance with existing procedures established by Project Headquarters and defined in Operations Manual 55-1. "Reports Control Manual", [ ] should be in receipt of the [ ] twelve hours [ ]

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prior to takeoff. The need to provide the detachments with essential information was recognized in the compilation of Operations Manual 55-1, and proven during the USCM. The problems faced by this unit due to the limited time factor in the preparation and launching of assigned operational missions have been discussed personally and in numerous messages. The most recent requested that every possible effort be made to expedite the [ ] reports within the established time limit of not later than 12 hours prior to scheduled takeoff time. I would like to reiterate how very essential it is that this unit be provided with the necessary information on time schedules as established in Operations Manual 55-1 to allow for proper planning and management of personnel and materiel resources. If [ ] continues to be late, as in all past mission directives so far received, [ ] cannot be responsible for launching more than two sorties for any one day's operations at specified takeoff times. The ability to plan and execute for three or four sorties in the time authorized is extremely marginal. Therefore request the [ ] be received 18 hours prior to the first takeoff time when three or more sorties are programmed for any one days operations. If above is not feasible, the squadron operations staff must be augmented by one (1) Pilot AOB and one Navigator in order to meet the tight schedule and high sortie rate now in effect. Operations pressure is greater under our present field conditions than was experienced during the USCM. The squadron proved that extended conditions of operations as were experienced during the USCM could not be supported for an extended period of time. The same is true under actual field operations where the pressure is even greater.

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An alternative to the above would relieve this pressure if pre-planned missions were furnished the unit in order that pre-planning could be accomplished by the squadron operations planning staff where only last minute changes and wind factors could be worked into the flight planning at the last two hours prior to takeoff. Another suggestion would be to include the mission in the [ ] report so that additional planning time for the unit would be available. Then, if there were any last minute changes due to weather or other factors, these could be included in the [ ] report with sufficient time to make the changes prior to the mission.

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Under the present organization the two main suppliers feel that the maximum sortie rate they can support over an extended period will be two (2) per day. Additional sorties may be added after a period of one or more days shutdown. For example, during the normal two sortie per day rate, if a shutdown occurred for one or more days then the next operational day it would be possible to dispatch three (3) and perhaps four (4) sorties for one day. After that maximum effort, the sortie rate would again fall to the two figure as a constant capability. However, this rate could be increased over an extended period with the increase of one U-2 and one [ ]

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In addition to the above factors on sortie limitations, consideration of [redacted] availability must be considered. Under a maximum sustained effort, the [redacted] factor may be the greatest limitation. To date, this has not been true, but it very well could develop as the main limitation if operations were speeded up to the point where proper crew rest could not be given.

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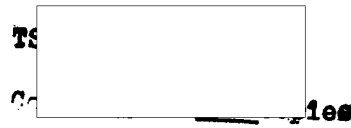
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DISTR:

Original - Headquarters

ATTACHMENTS:

1 - Weather Report, Mission A2013 7S# 155309A



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