

*Land Panel Briefing
2 October 68*

System Requirements for Strategic Warning

- Consistent production of imagery at about 2 1/2 foot resolution at nadir and not to exceed 5 feet at 45° obliquity.
- Daily sampling of target categories.
- Capability to deliver imagery to the ground soon after sensing is achieved, i. e., in near real time.
 - Delivery of imagery or information to decision authorities within a few hours after collection with the maximum proportion of lapsed time available for interpretation and analysis.
 - Enable imagery intelligence to meet timeliness demanded from CRITIC system.
- In crises capability to obtain quick coverage of targets and quick receipt of information on them.
- Capability for constant exercise of system.
 - To establish a baseline of norms
 - To make certain system works and that community can handle results.
- Capability to perform strategic warning function while accomplishing regular routine or special surveillance as required.

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Strategic Warning Requirements

- 14 categories of homogeneous installations most likely to produce warning - Total targets - 505
- Categories and targets subject to change
- Sample category treatment

Number of Installations	Daily Sample Required ^a	Lead Time Available	Imagery Mode	Essential Warning Information Required
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^aSpread based on 70 and 90% statistical assurance of detecting abnormal activity.
Total daily requirement 83-142.

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Capability of Present and Future Systems
to Meet Strategic Warning Needs

KH-4

- Resolution not adequate

KH-8 & 9

- Resolution adequate
- No guarantee of being on orbit when required
- Best case response time 3 days or more
- Inability to provide and update warning data base
- Full time on orbit would require many more launches
- Timeliness improvable by launches on demand, recovery on demand, processing and interpreting near recovery site

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MOL

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- o Resolution adequate
- o 30-day orbit life
- o Possible near real time data link
- o Possible voice reporting
- o Limited access to targets
- o Full time on orbit would require many more launches than now planned

KH-8 Readout

- o Bench tested concept
- o Resolution adequate
- o Response time 2-11 hours
- o 30-day orbit life
- o 2-3 vehicles on orbit simultaneously
- o 24-36 launches a year required for full time on orbit

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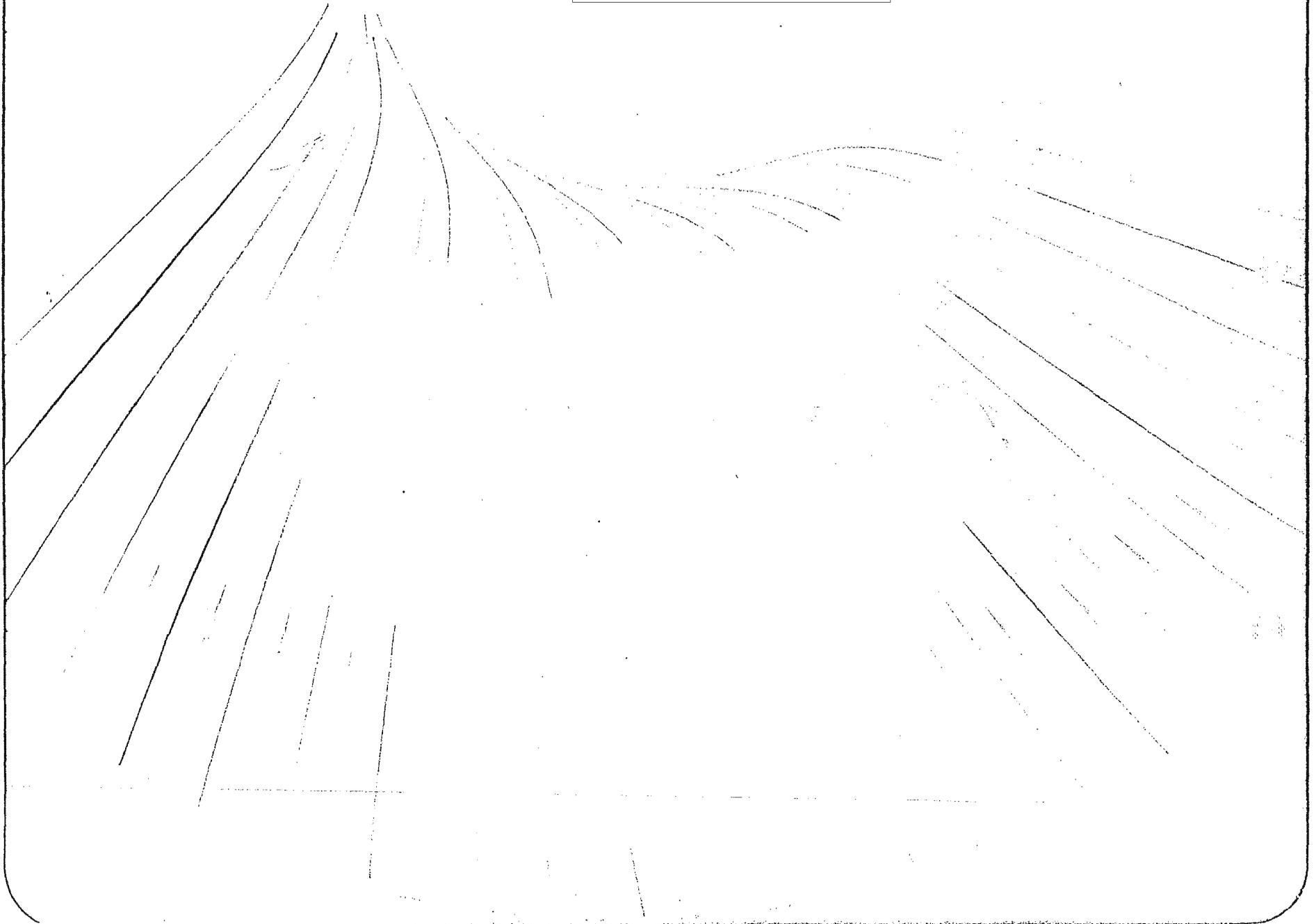
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Coverage Capability of Tired Vehicles

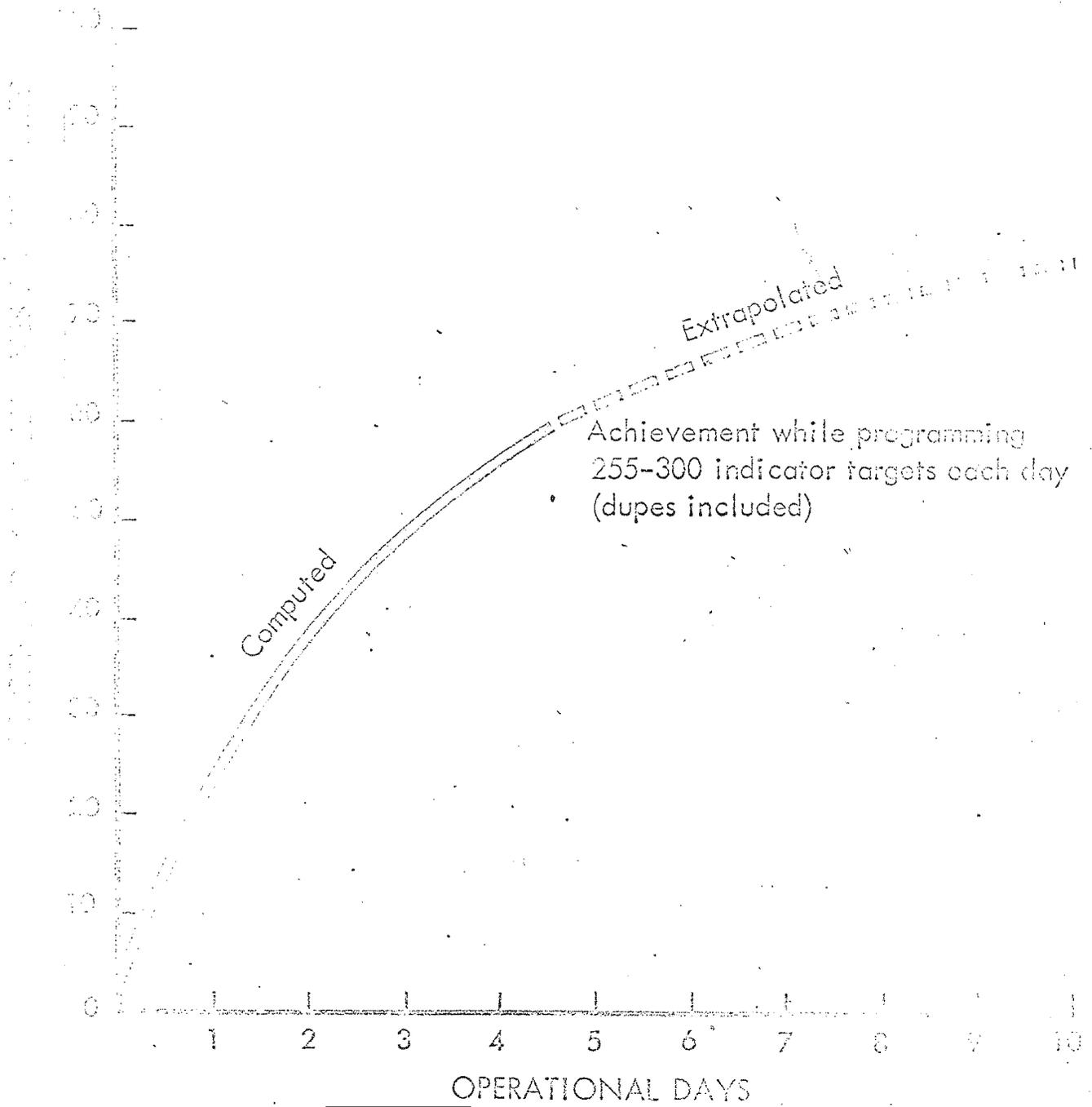
Altitude: 169 n.m.
Period: 90.82 min.

Access Swath per Vehicle Pass: 340 n.m.
Total Access of

Inclination: 56.4°
Maximum Obliquity: 45°



Relative Programming of World-Wide Critical Targets* by Electronic Warfare System



Approximately

Source: CIA

Classification

Declassification

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Conclusions

- o Physical recovery systems cannot meet strategic warning requirements.
- o A system providing 2 1/2 ft. resolution, daily sampling of warning categories, and near real time delivery of interpretable imagery to the ground can contribute to strategic warning.
 - o A system meeting the above specifications will be expensive but can respond to routine and special surveillance requirements and thereby accomplish savings by reducing or eliminating other collection programs.

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Strategic Warning

- Knowledge that an enemy is preparing to launch an attack.
- Transmitted to national security authorities by intelligence organizations after evaluation.
- Used at highest level to determine national policies and reactions.

Intelligence Problem

- To detect changes from normal patterns which may indicate preparations for hostilities are under way.

Role of Imagery Reconnaissance

- Acquire visible evidence of changes
- Provide "what is" information
- Stimulate other collection
- Verify tip-off information from other sources

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High Level Concern with
Strategic Warning

- The President's Foreign Intelligence Advisory Board
- Strategic Warning Surveys
- Special National Intelligence Estimates

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The Intelligence Community's
Strategic Warning Apparatus

- The Indicator Check List
- The CIA Watch Office
- Departmental watch offices
- National Military Command Center
- The National Indications Center
- The USIB Watch Committee

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Recent Reports and Studies

The Shute Report, 1963-1967

- Reviewed and assessed applicable sensors
- Recommended additional studies

SNIE 11-06-66, 18 August 1966

- Discussed impact of missile deployments on warning
- Discussed possible role of satellite reconnaissance in providing strategic warning

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The COMIREX Warning/Indications Task Force,
1967-1968

Objectives

- Examine and evaluate the contribution of overhead reconnaissance to warning/indications intelligence
- Prepare requirements for use in system development and operation
- Assess system impact on intelligence community

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Low Key Results

- Confirmed desirability of having an imagery system meeting specifications for resolution, timeliness and number of targets required for strategic warning and providing capability to conduct routine or special surveillance tasks.
- Specifications forwarded to NRO for study and report on
 - Ways and means of meeting the specifications, including the optimum mix use of current and planned reconnaissance programs against existing search and surveillance requirements.
 - Costs and time schedules involved.
 - Possible modifications that could result in savings or improvement in capability.

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