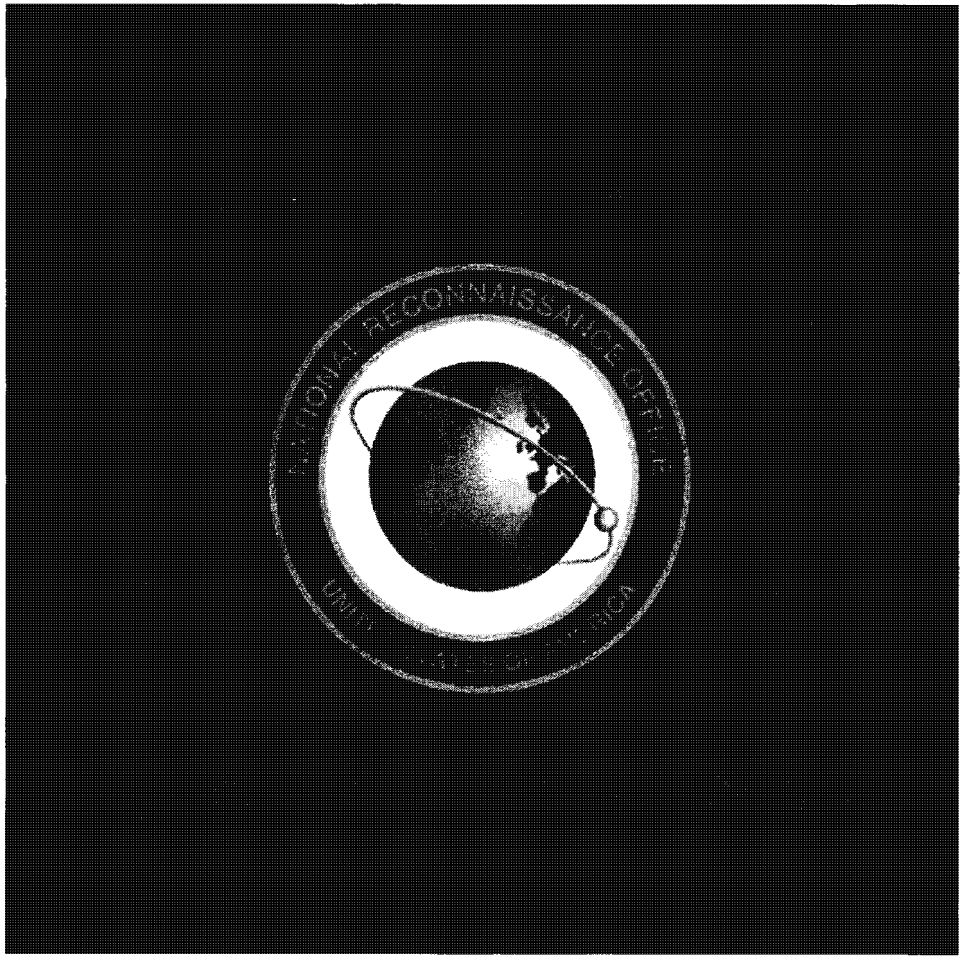
(U) National Reconnaissance Office Primer



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CL REASON: 1.5(c)
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DRV FROM: NRO CG 6.0
21 May 05

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Overall classification of this briefing is:

~~TOP SECRET//COMINT/ TALENT KEYHOLE// RSEN,IMCON,NOFORN//MR~~

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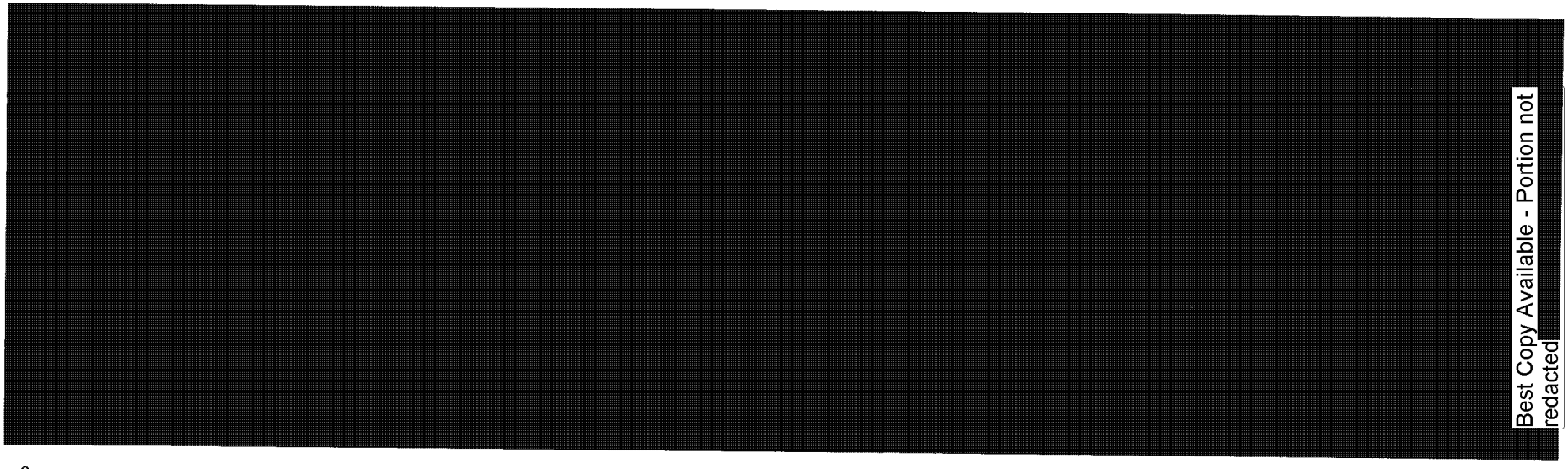

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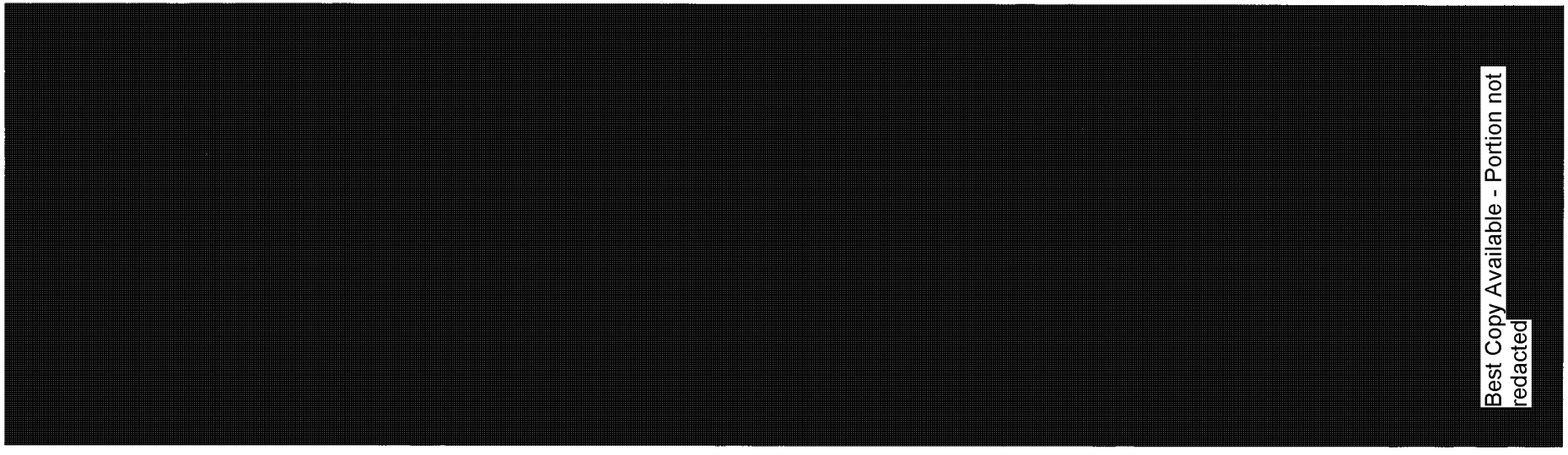
Objectives

1. Know the fundamental characteristics of various orbit types used for space-based operations
2. Know the primary types of intelligence supported by space-based ISR and the basic types of sensors used
3. Know the various types of primary intelligence products made available by space based collection architecture
4. Know the advantages/disadvantages of certain orbits for ISR, sensor types and why specific orbit types are selected.



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Objectives Restated

1. An orbit is an orbit right "round and round it goes"– what's the difference?
2. What are the main types of intel/info I get from space and what do I use to get it?
3. What does that intel / info look like – what does it do for me
4. Why do we use all these different orbits anyway?

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NRO Mission

The NRO develops and operates unique and innovative space reconnaissance systems and conducts intelligence-related activities essential for US national security.

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(U) Support to Defense and Intelligence Communities

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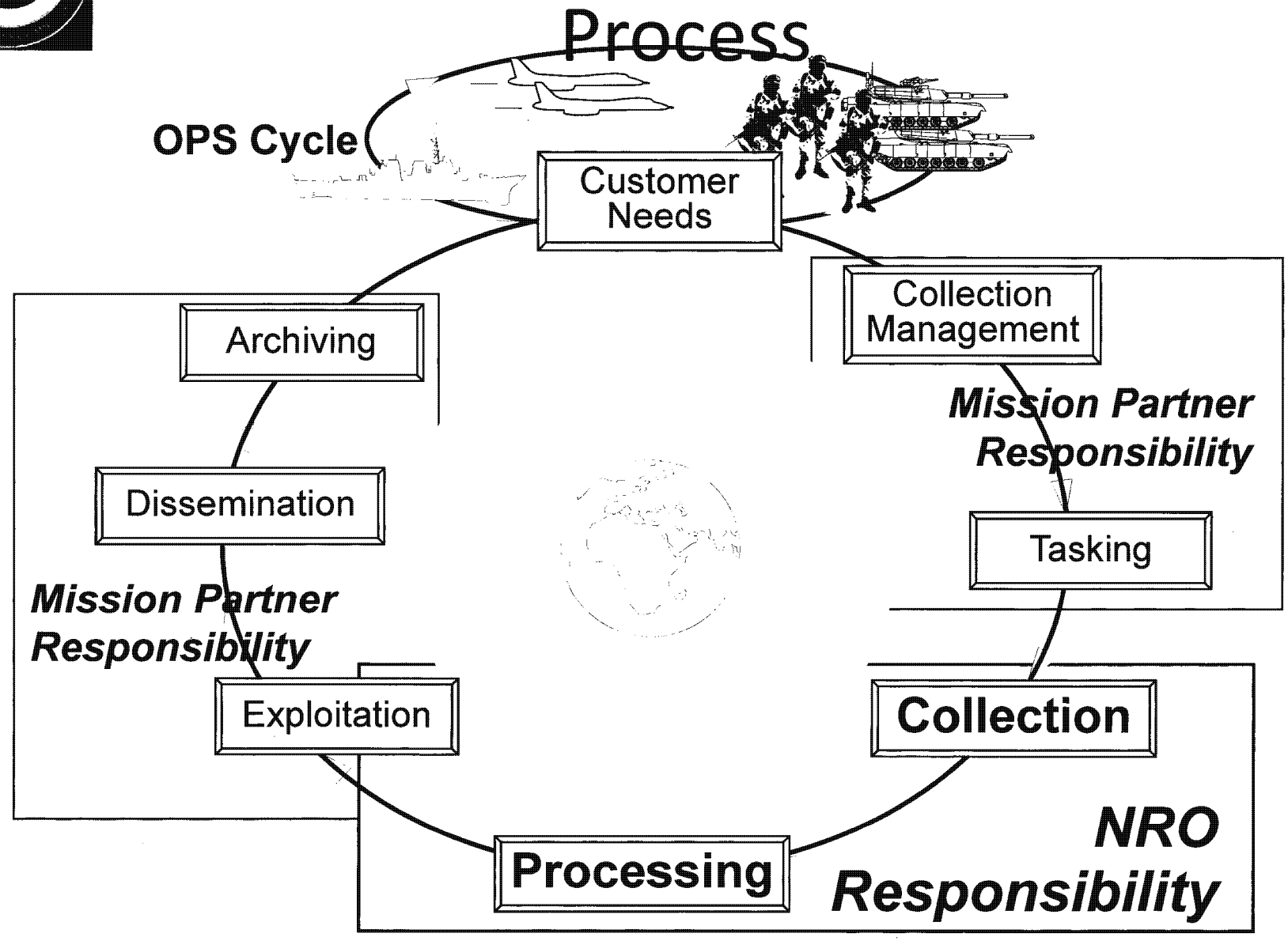
NRO and the Intelligence Process



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Unique Attributes of Overhead Systems

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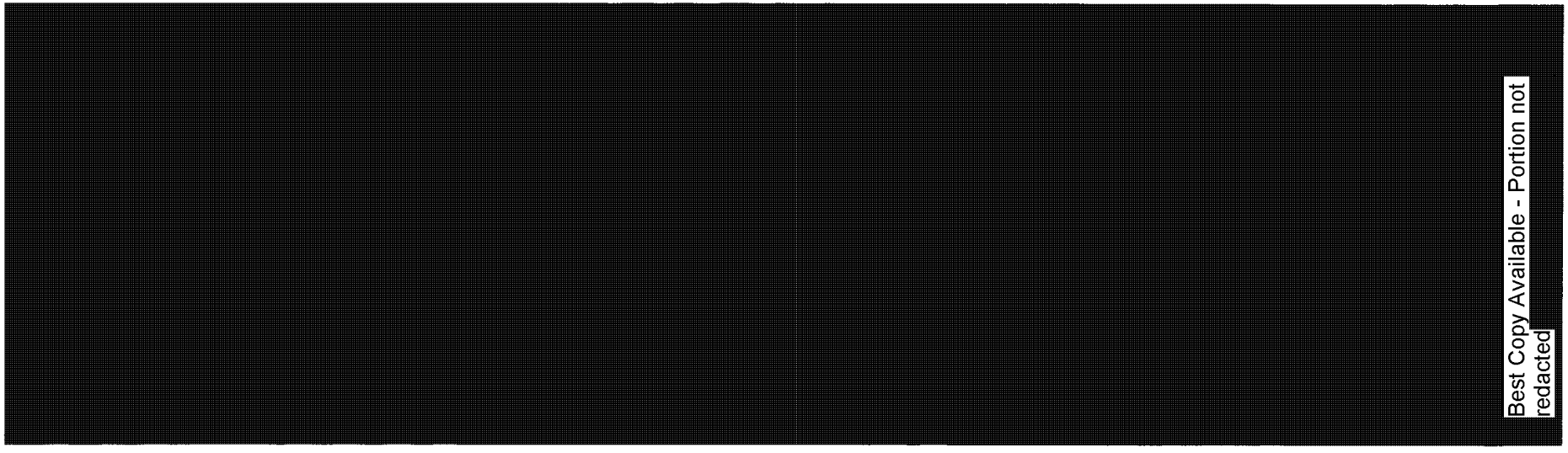

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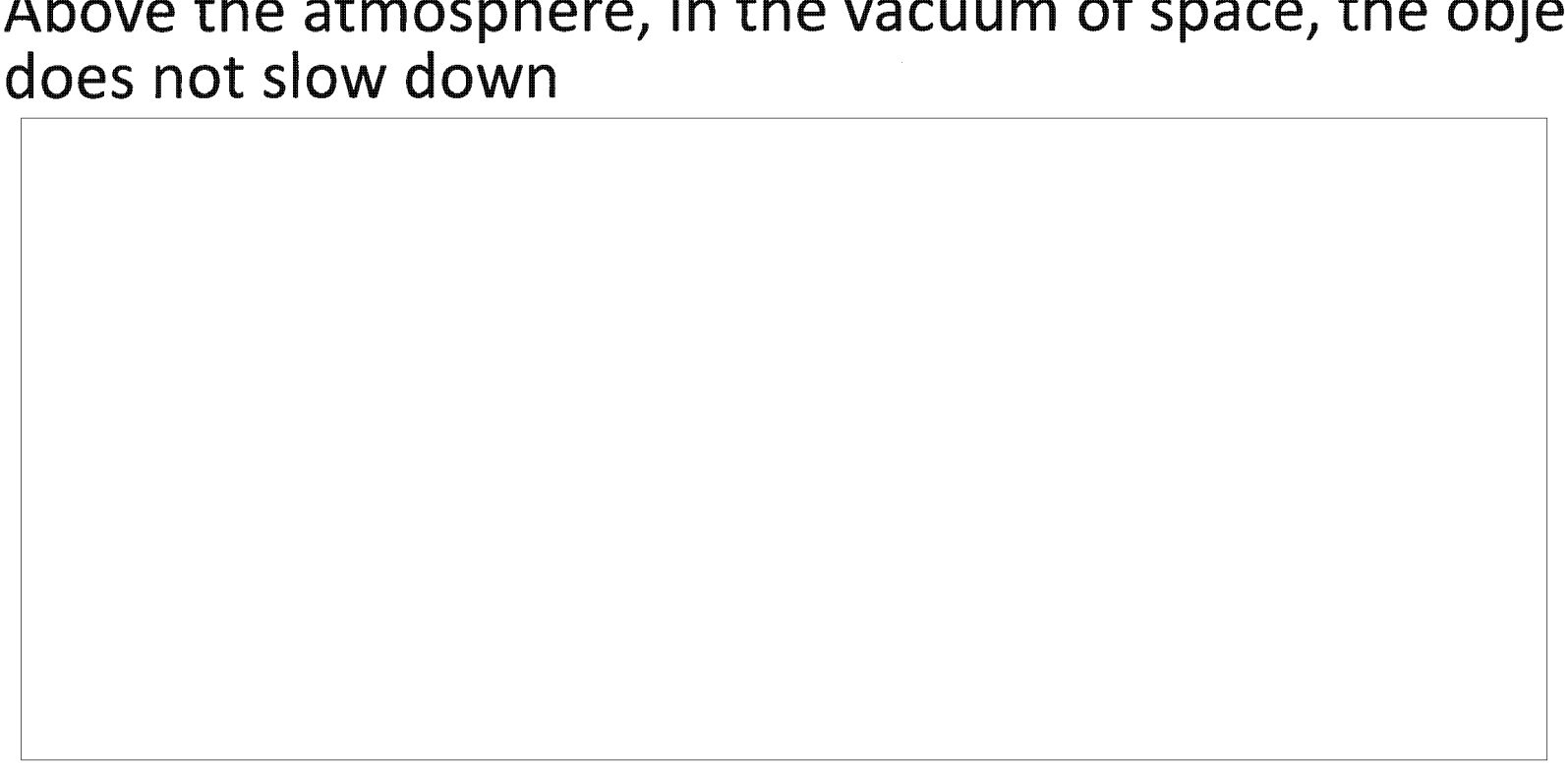
Orbital Basics

- Given sufficient velocity, objects orbit the Earth rather than fall back to it
- Above the atmosphere, in the vacuum of space, the object does not slow down



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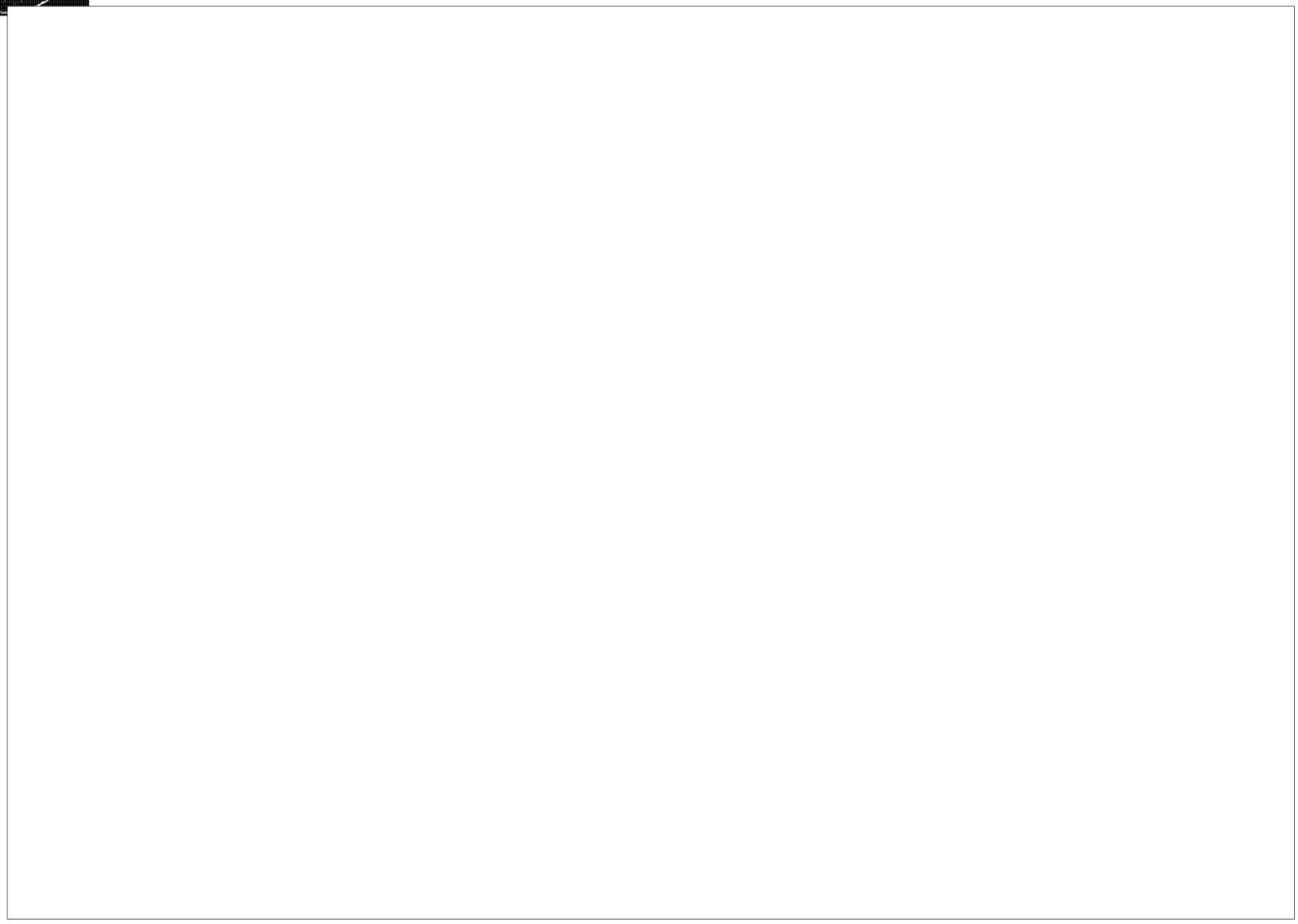
(U) Primary Types of Orbits



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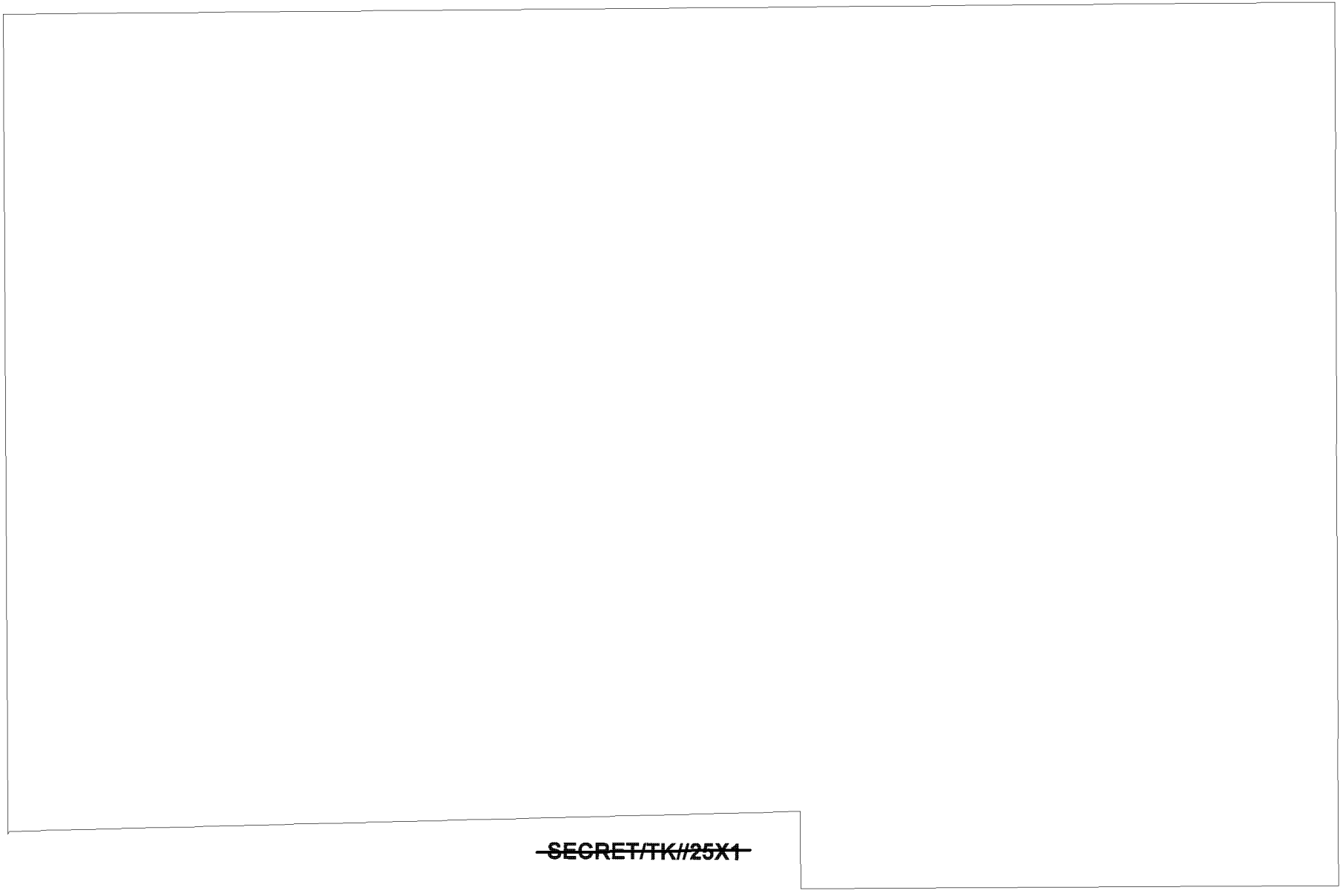
(U) Low Earth Orbit (LEO)



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(U) Low Earth Orbit (LEO) POP QUIZ!!

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Answer: Stop abusing us – we haven't learned that yet!!

Nifty looking toys, aren't they!

(U) Highly Elliptical Orbit (HEO)

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(U) Geosynchronous Orbit (GEO)

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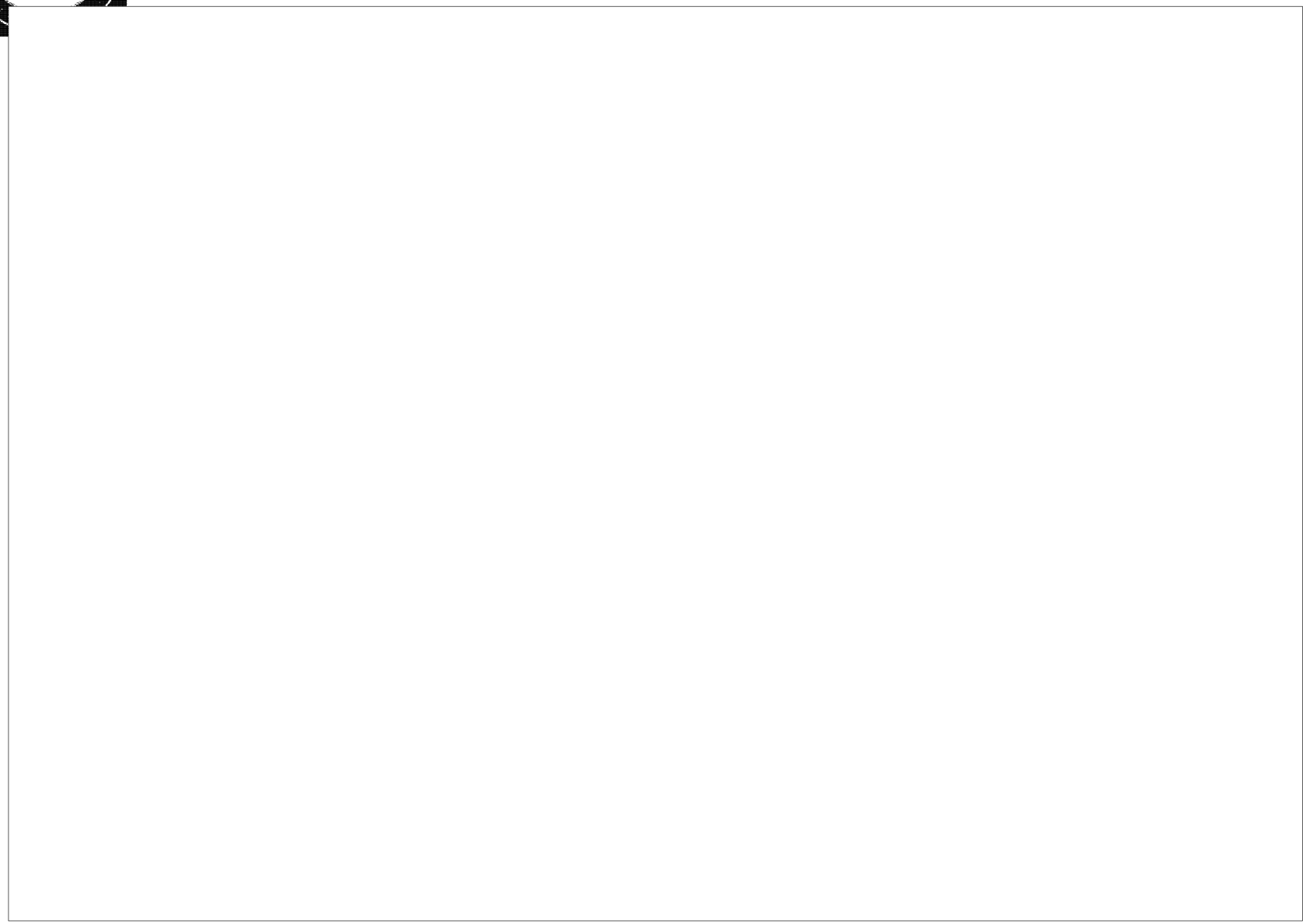
(U) Orbit Capabilities



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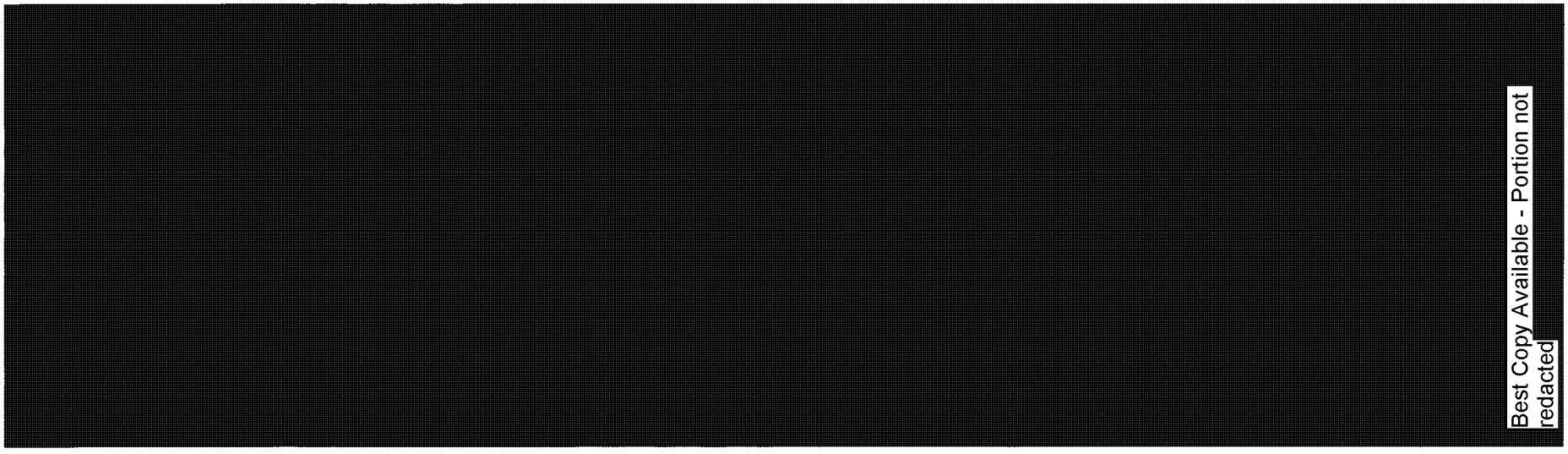

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(U) Intelligence Terms

- (S) GEOINT:
  - GEOspatial imagery INTelligence
- (U) SIGINT:
  - SIGnals INTelligence comprised either individually or in combination of, all COMmunications INTelligence (COMINT), Electronics INTelligence (ELINT), and Foreign Instrumentation Signals INTelligence (FISINT)
- (U) MASINT:
  - Measurements And Signatures INTelligence derived from analysis of data from multiple sources

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(U) On-Orbit Satellites – Today

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(U) What Do We Collect?

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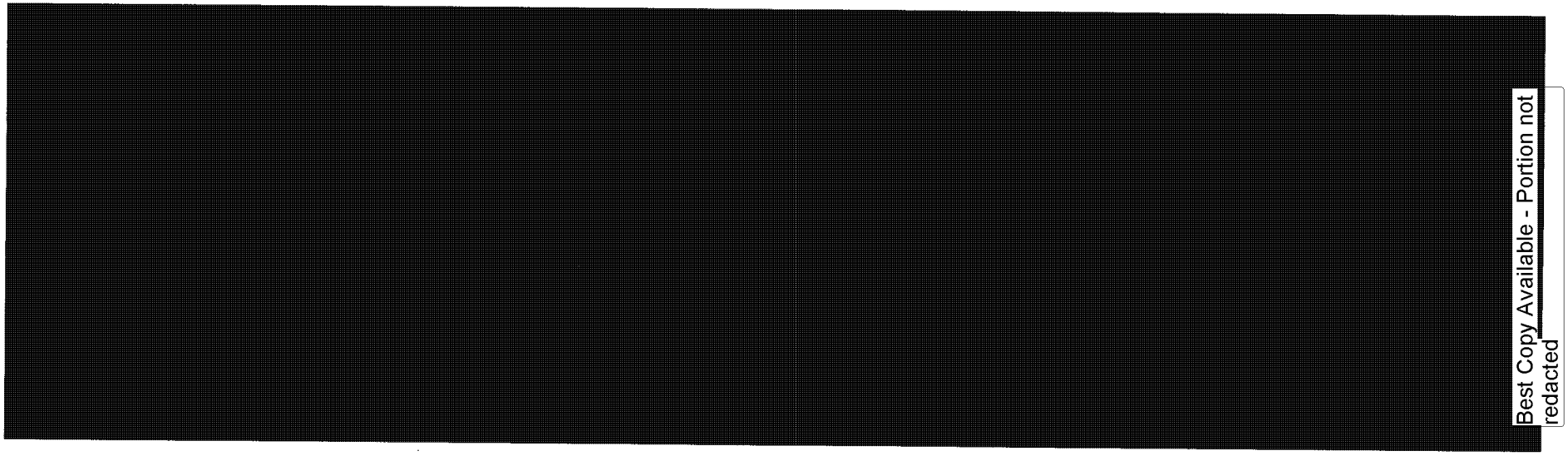

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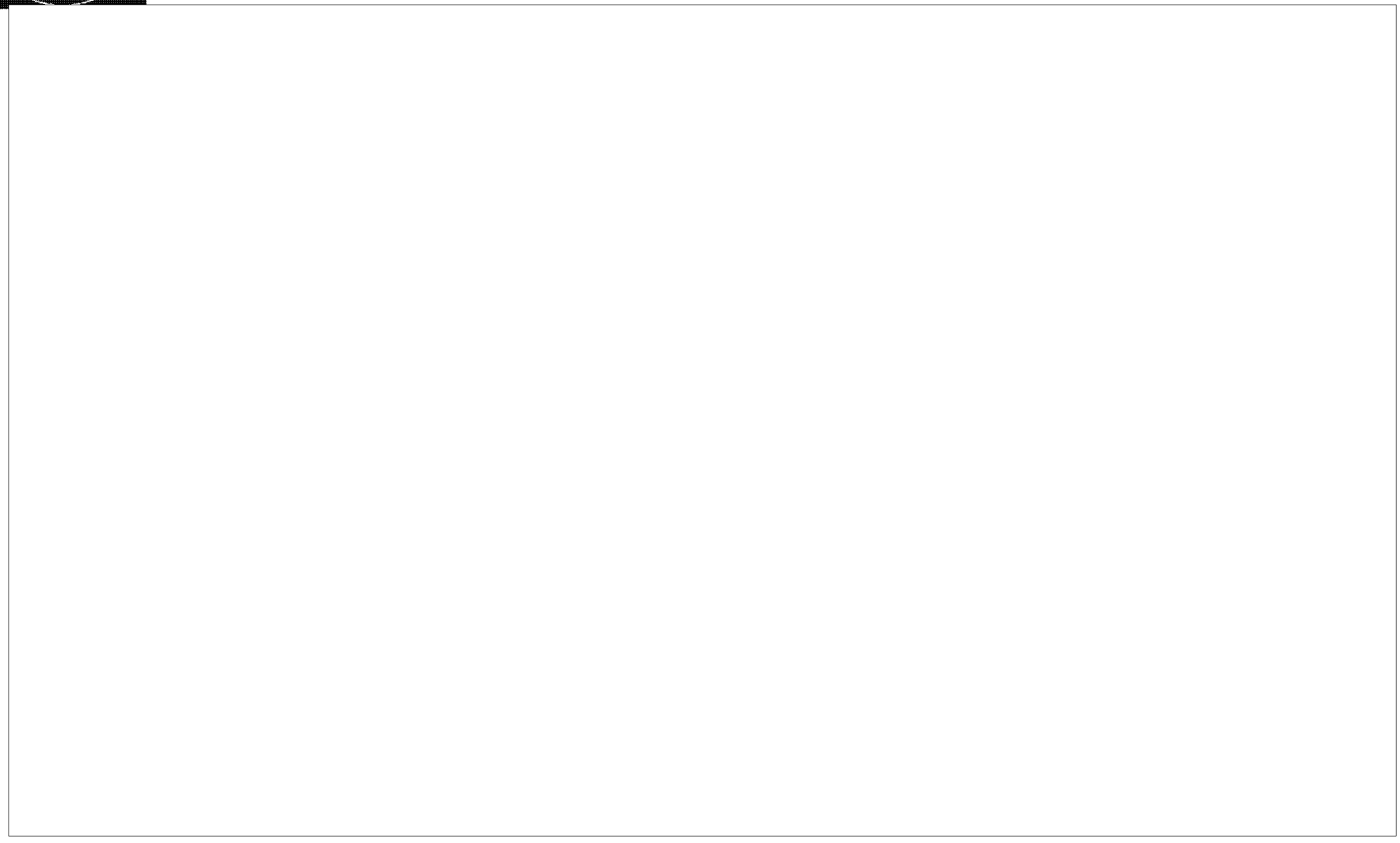
U) Electronic Intelligence - Day in the Life



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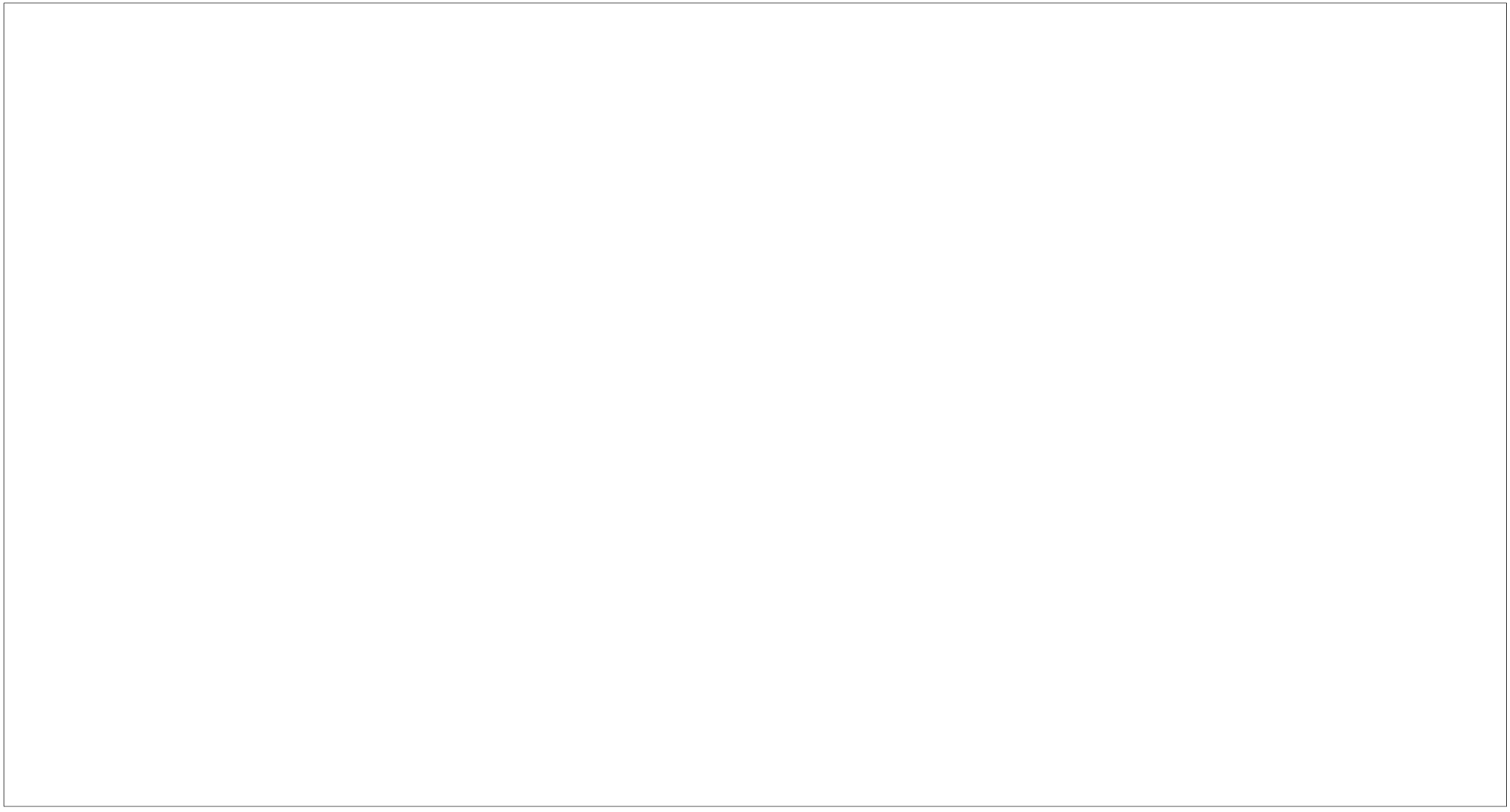
(U) Cueing – Intelligence Integration



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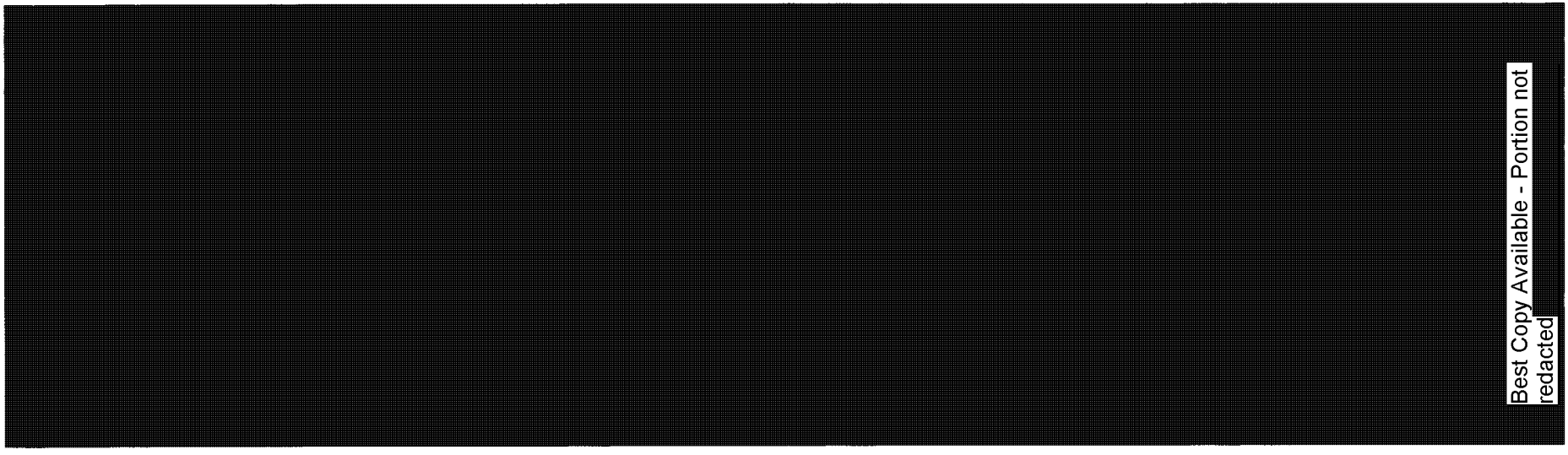

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(U) Communications Satellites

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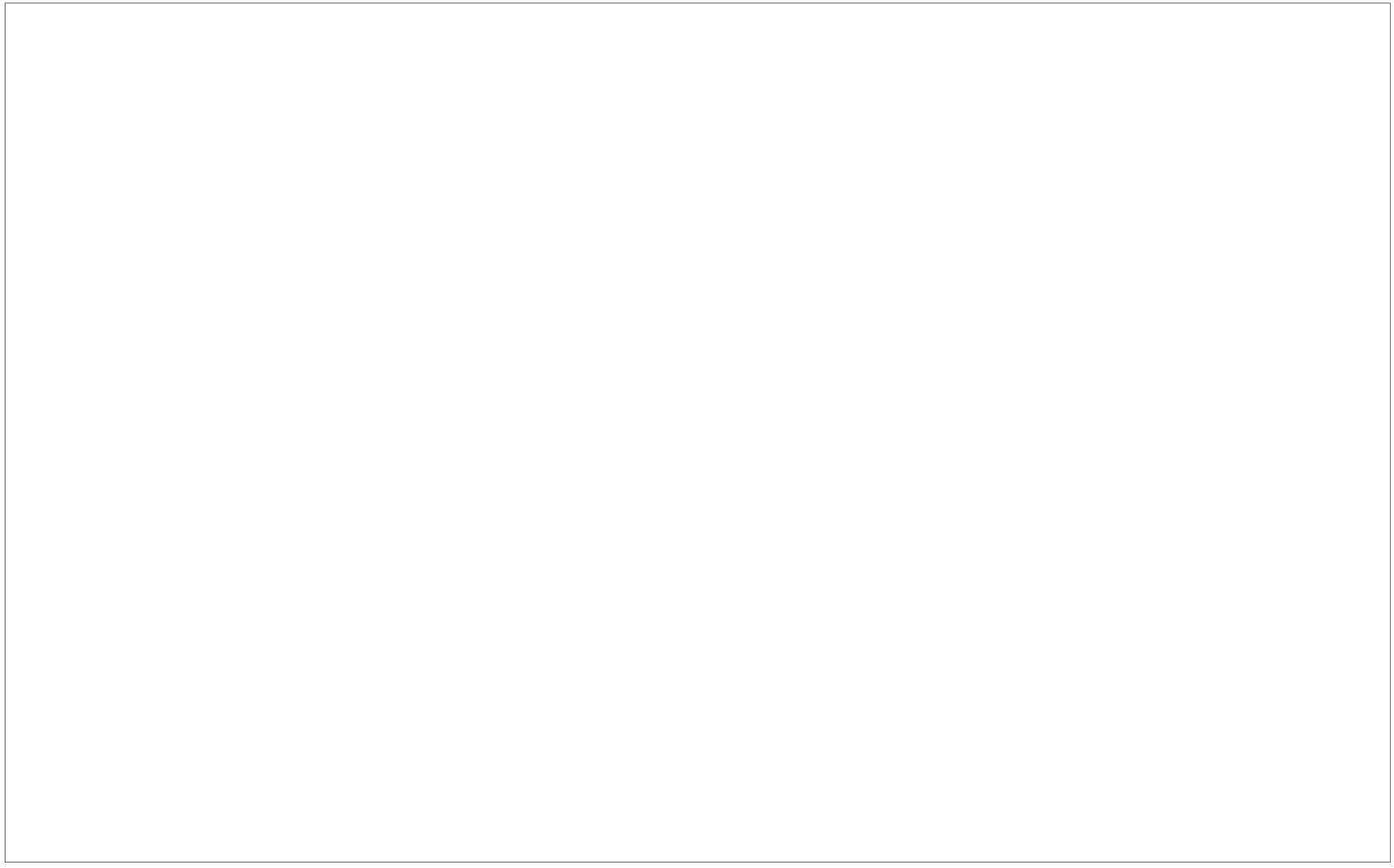
(U) Communications Systems



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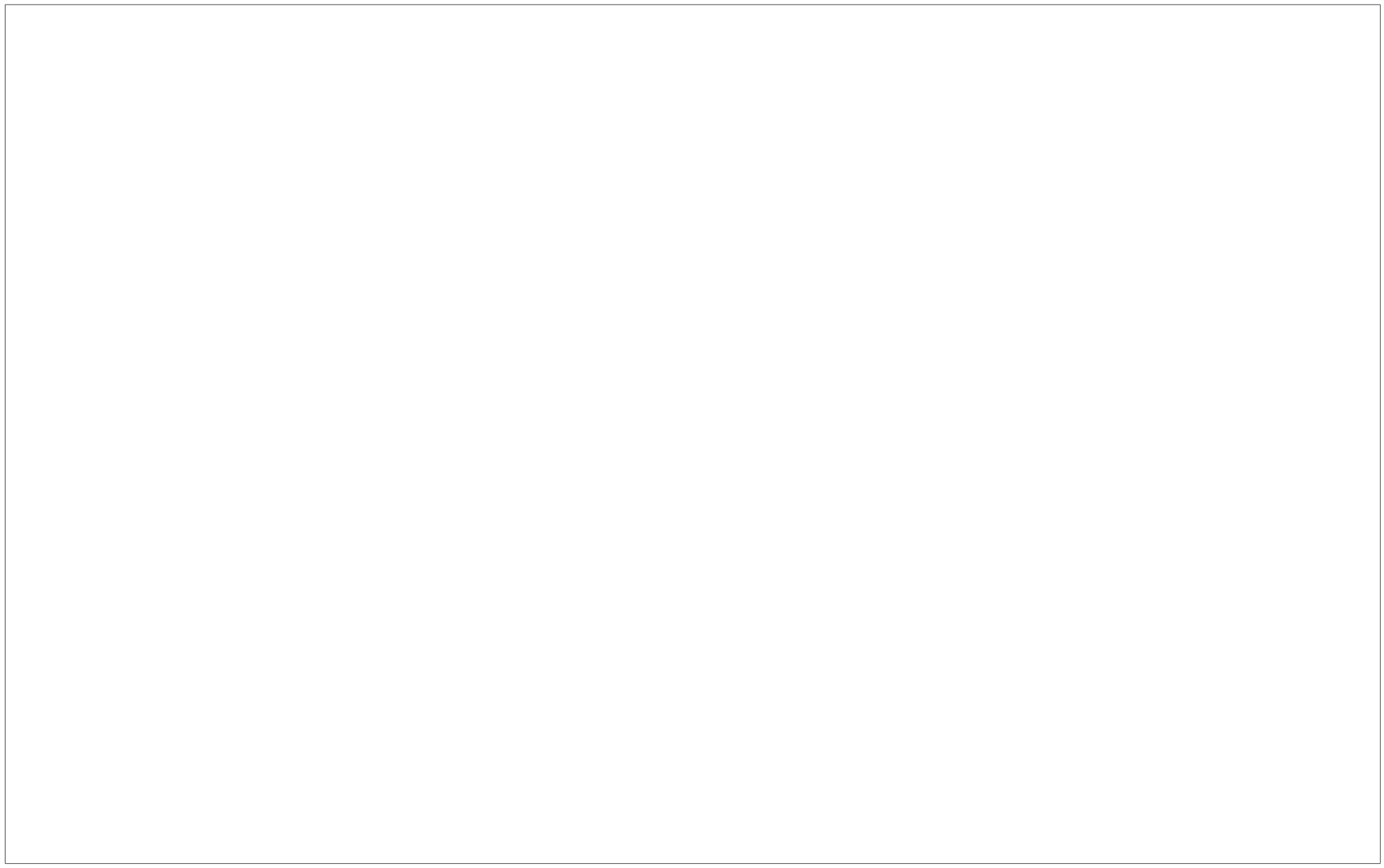
(U) COMM Transition



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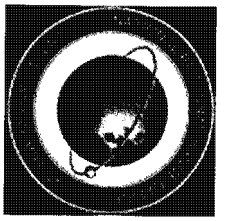

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(U) Evolving Missions

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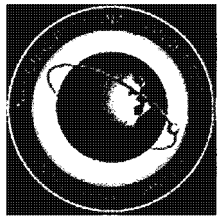

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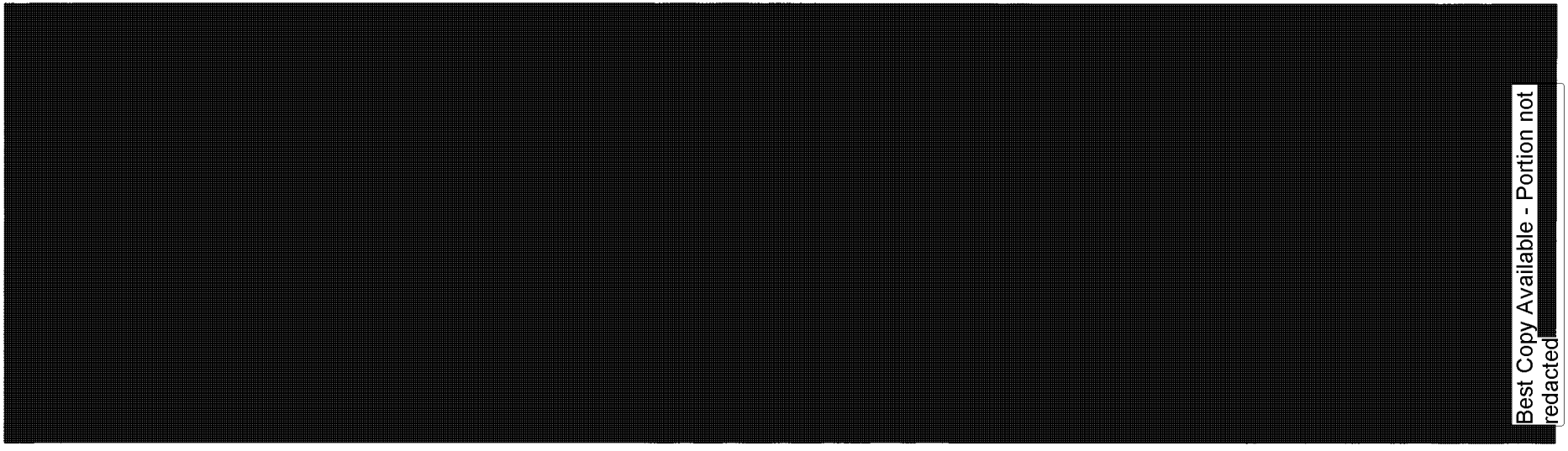

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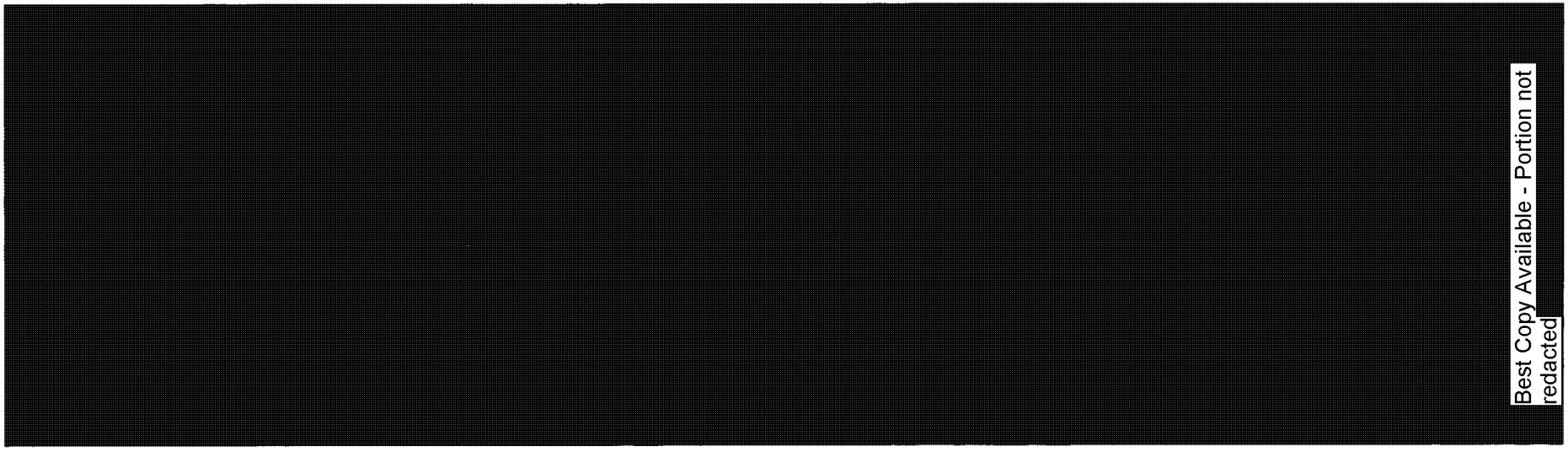

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QUESTIONS?

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