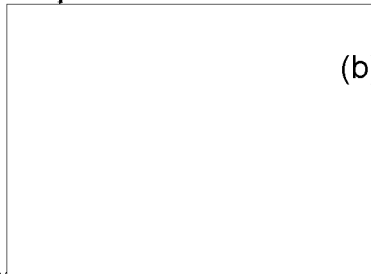




National
Foreign
Assessment
Center

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Soviet Performance During the Cosmos 954 Affair

An Intelligence Assessment

~~Top Secret~~

EO 12812-1

APRIL 1974

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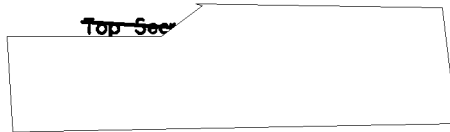


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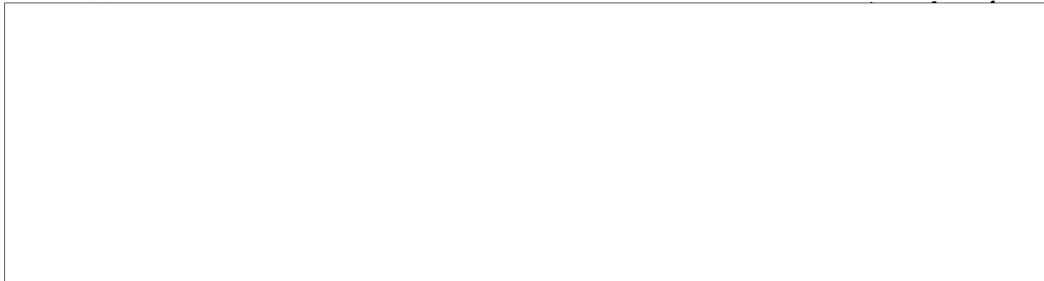
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NOTE

This study, requested by the Assistant to the President for National Security Affairs, describes and evaluates how the USSR reacted to its loss of control over Cosmos 954, a military reconnaissance satellite powered by a nuclear reactor, and to the satellite's atmospheric reentry, which scattered fragments on Canadian soil. Particular attention is paid to the period after our notification of official concern to the USSR.



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Soviet Performance During the Cosmos 954 Affair

Central Intelligence Agency
National Foreign Assessment Center

April 1978

Key Judgments

We do not know to what extent the Soviet political leaders, as opposed to the technical experts, were aware of Cosmos 954 before our demarche of 12 January.

Cosmos 954 was the twelfth in a series of Soviet reconnaissance satellites, all powered by nuclear reactors, that have been used since 1971 to supply intelligence data on US warships.

- The leaders probably had been briefed, most likely around the beginning of the program in 1971, on the overall program and its use of nuclear reactors.
- Soviet intelligence undoubtedly was aware of the intense US interest in these satellites. Soviet intelligence officials also almost certainly believed that we were aware of Cosmos 954's nuclear reactor and that we knew about the satellite's troubles.
- We simply have no way of knowing, however, whether the political leaders had been apprised before our demarche of their own intelligence services' estimates regarding our knowledge, or whether they were specifically briefed on the troubles of Cosmos 954.

There are three basic possibilities concerning the extent of the Soviet leaders' advance knowledge and appreciation:

- *First possibility: That the leaders had been told nothing about the problems of Cosmos 954 prior to our demarche.* The critical event that should have caused the technicians to alert the leaders was the onset of tumbling on 6 January, which made the satellite's atmospheric reentry inevitable. Yet for various practical reasons, includ-

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ing Brezhnev's poor health, the top political leaders may not have been briefed before our demarche only six days later (with a weekend included in the six days).

- *Second possibility: That the leaders were fully informed about the satellite and appreciated the potential political implications involved, but chose to "cross their fingers" and to count on the high probability that reentry would not cause serious international repercussions. They would have wanted to avoid unnecessary international embarrassment or panic; this approach fits the pattern of Soviet behavior in other "no win" situations.*
- *Third possibility: That the Soviet leaders were aware, at least in general terms, of Cosmos 954's troubles, but did not fully appreciate the potential political implications involved or anticipate the intensity of our interest in the problem.*

The third possibility is in our judgment the most likely. On the one hand, we find it difficult to accept the view that the top leaders were not briefed at all on the difficulties of Cosmos 954, and on the other we believe that if the Soviet leaders had appreciated the implications and anticipated our interest, they would have undertaken the special observation and precautionary measures that they did in fact later adopt.

Our demarche spurred immediate internal decisionmaking activity in Moscow, aimed at marshaling relevant facts and preparing a reply, and extraordinary military-technical actions reflecting new high-level political attention.

The Soviets were probably appreciative that the United States approached them quietly and nonpolemically, thus reinforcing the principle of primary US-Soviet responsibility for an esoteric subject involving high technology and politics. The nature of our approach probably added to the administration's modest stock of good faith in Moscow, and the Soviets may have concluded that our action helped prepare them to deal with post-reentry problems.

In the future there may be more involvement by the Soviet political leadership or other nontechnical groups in decisions on technical matters in order to anticipate possible international political implications.

This incident is not likely to lead the Soviets to stop using reactor-powered satellites in the future, and they will seek to preserve the largest possible leeway for continued space use of nuclear power.

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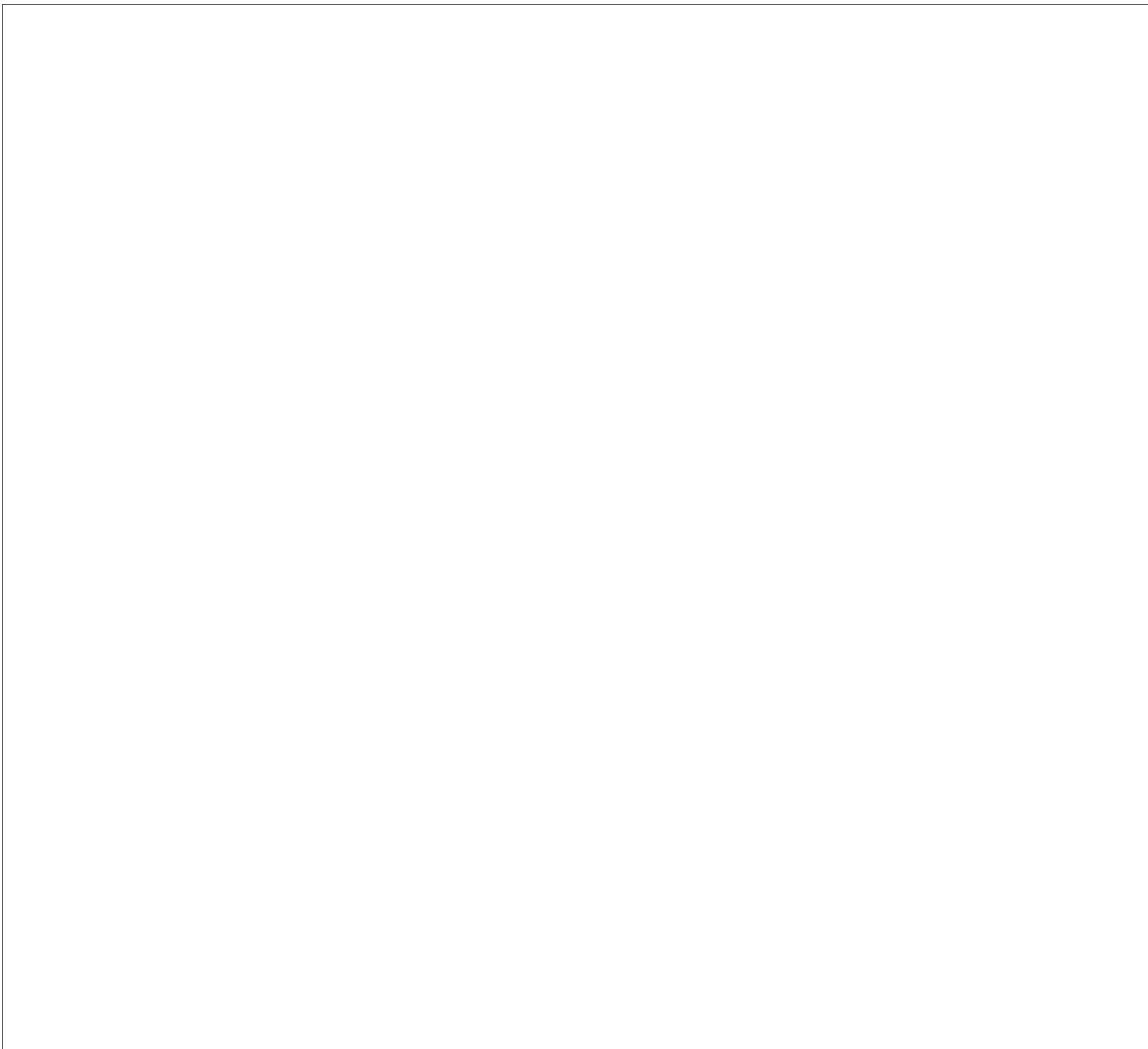
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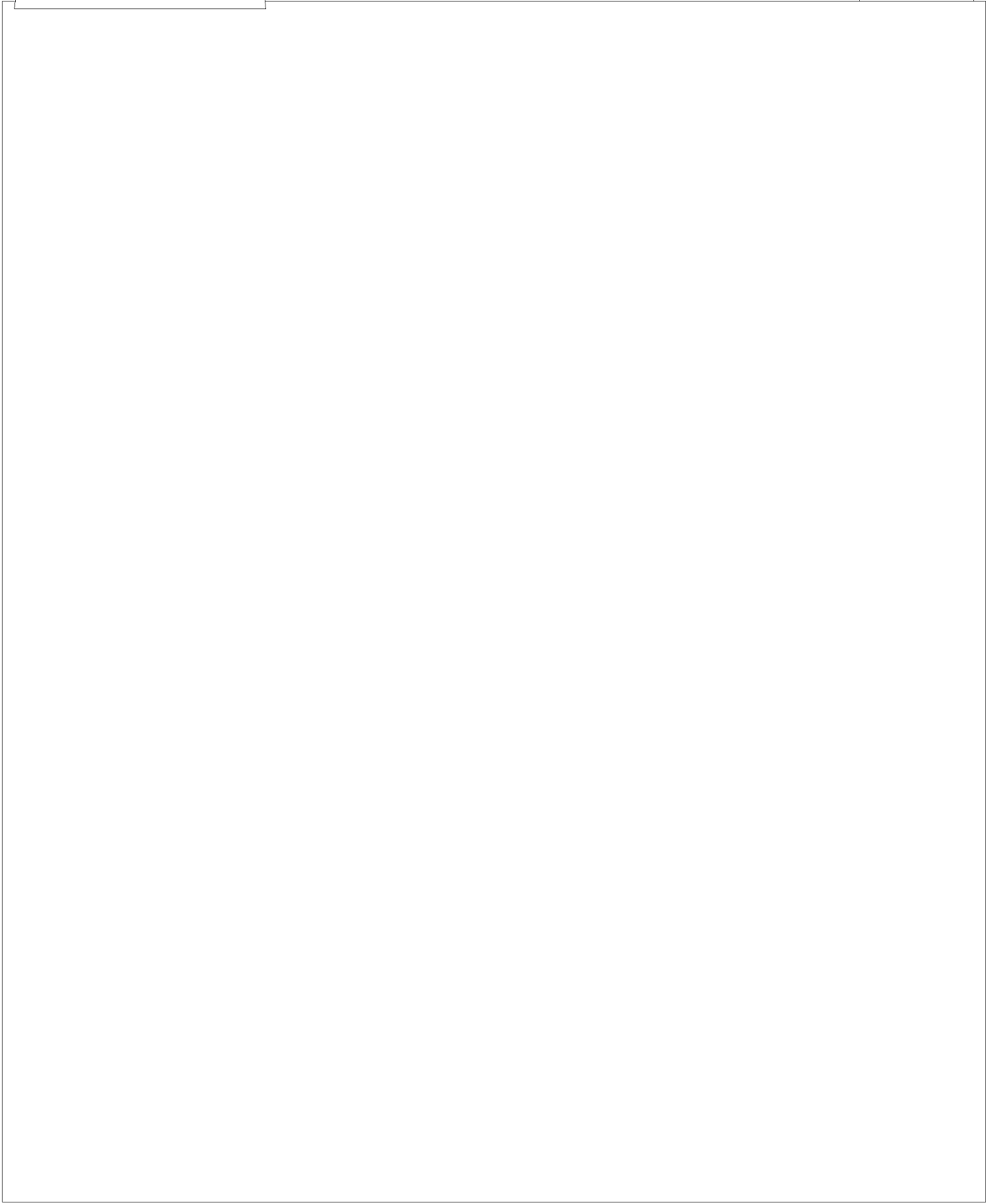
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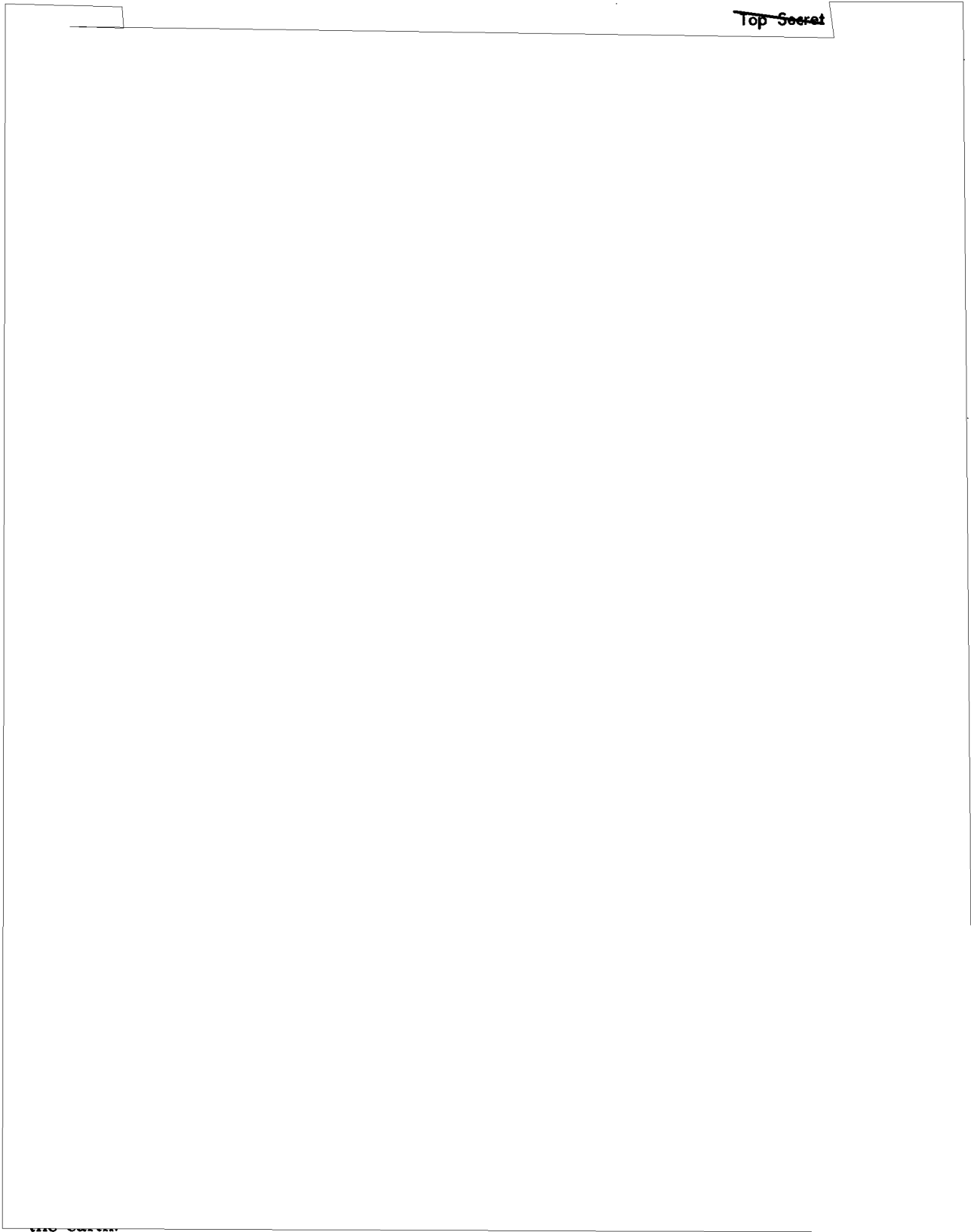
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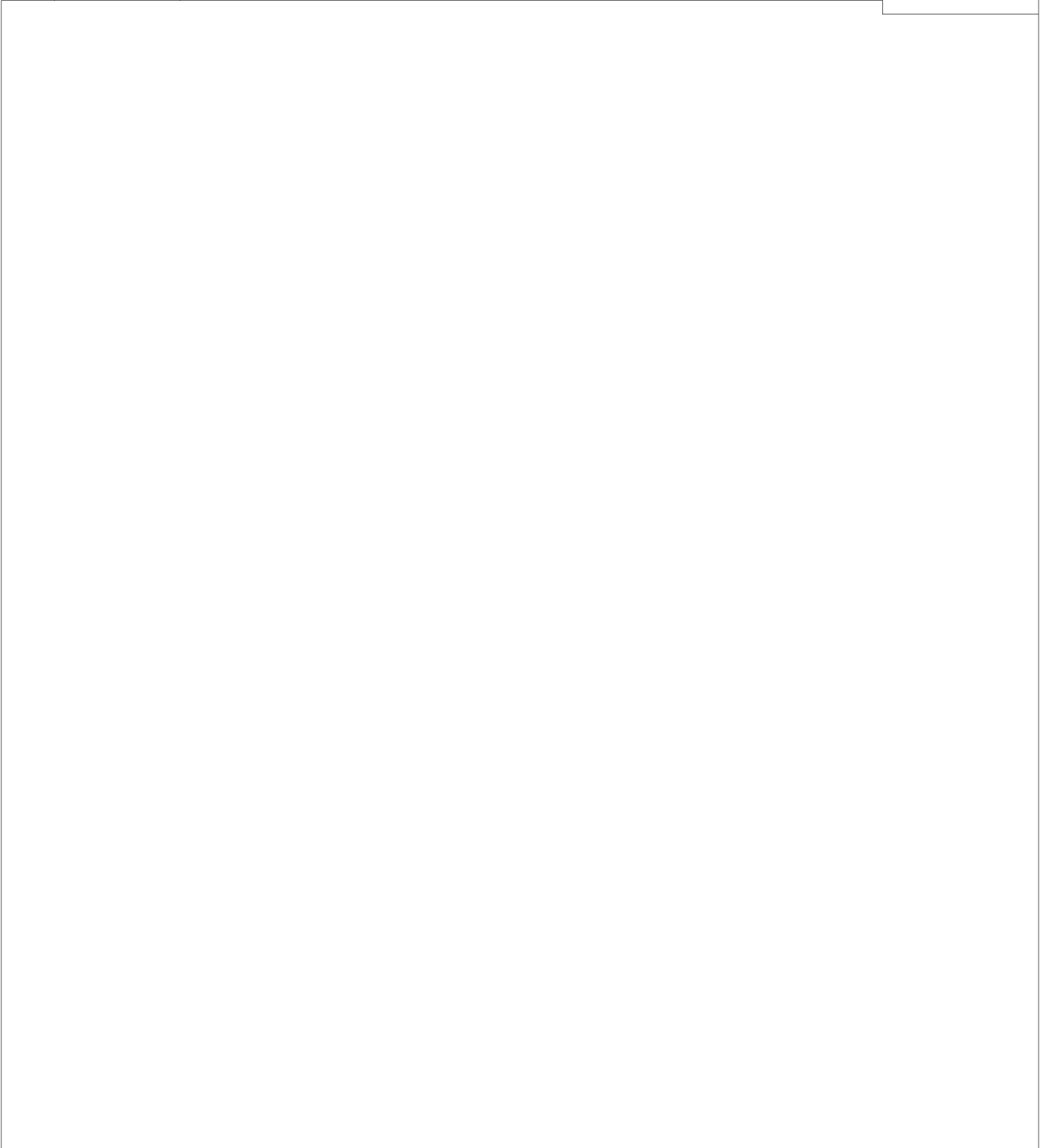


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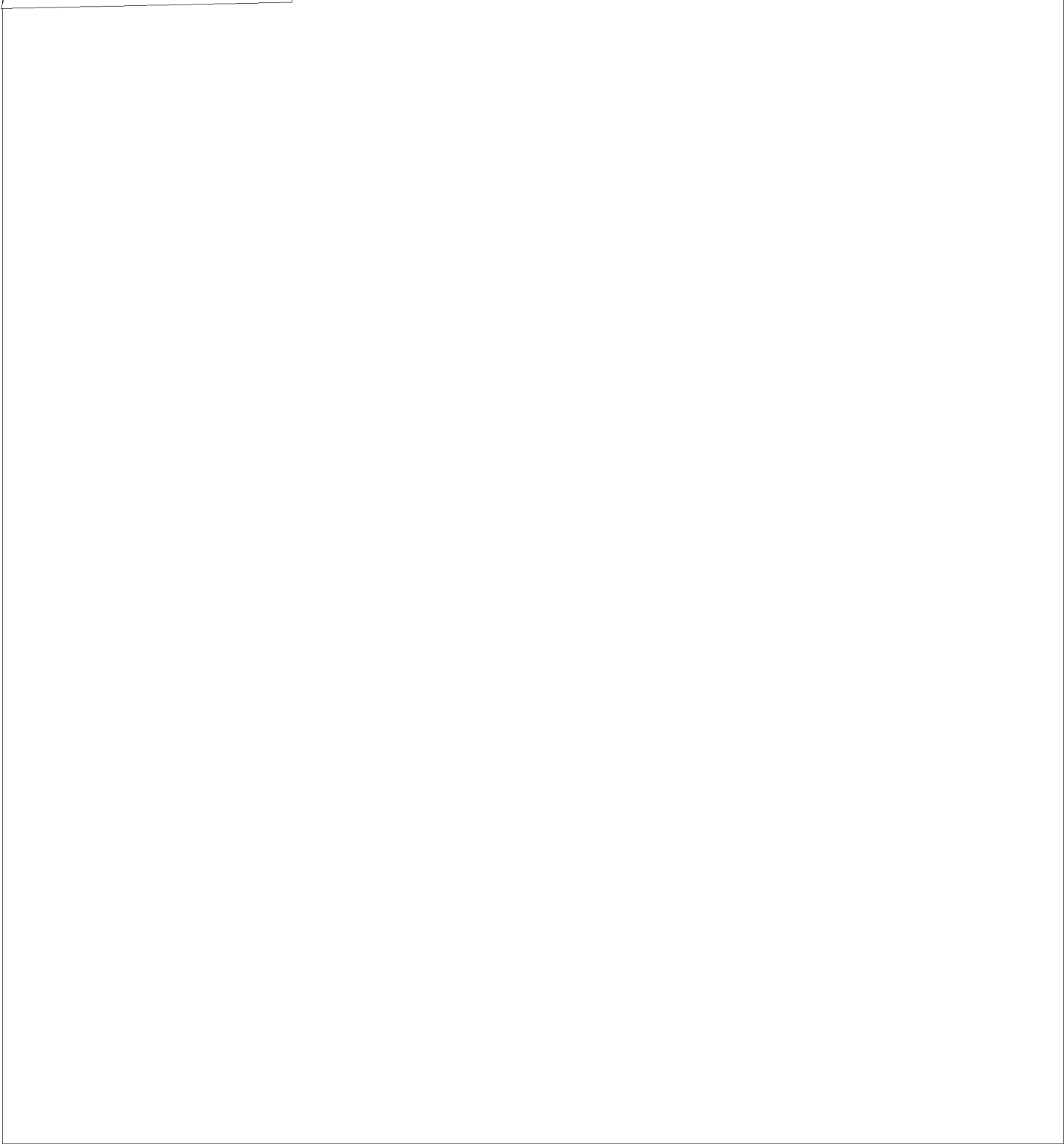
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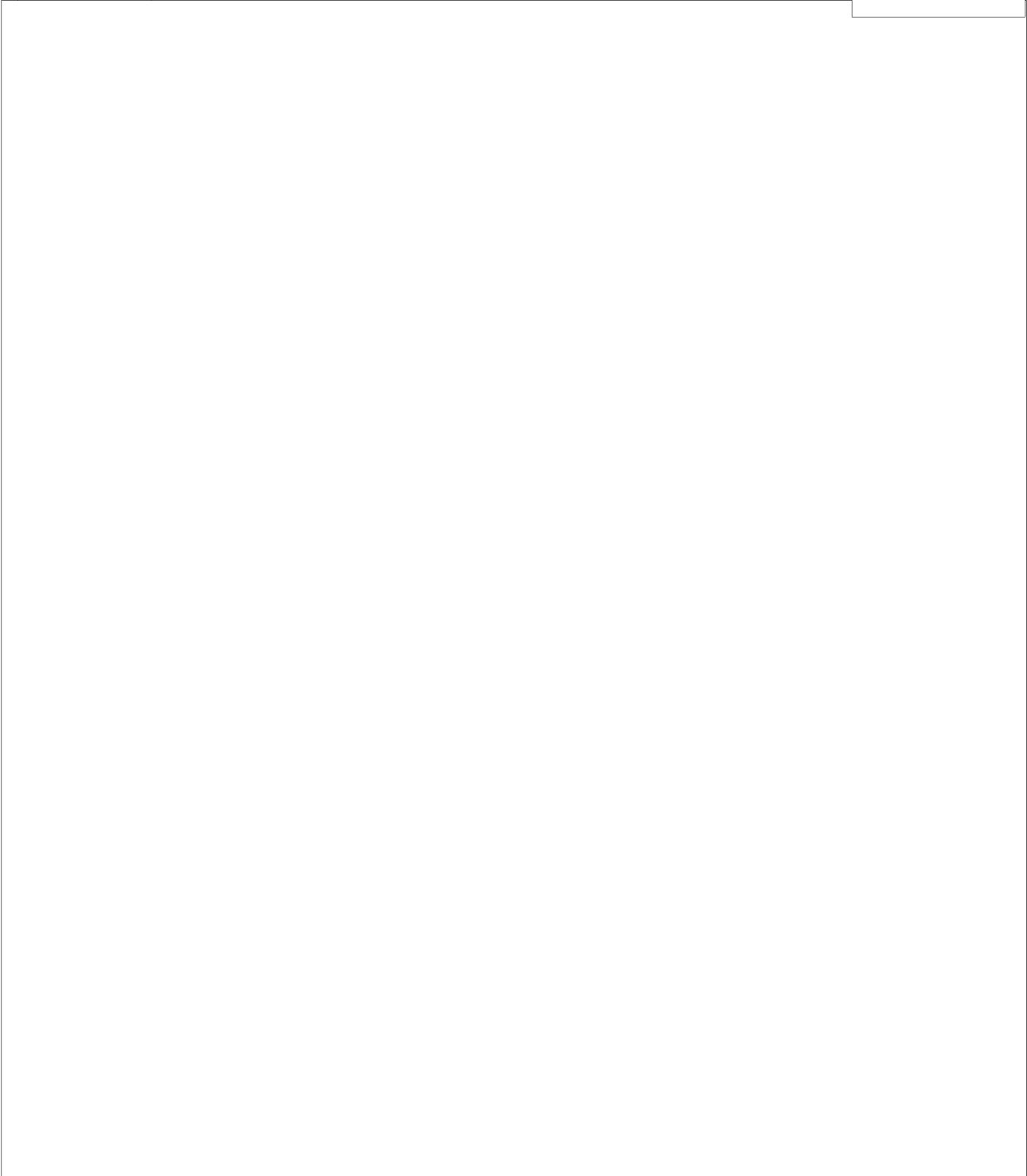
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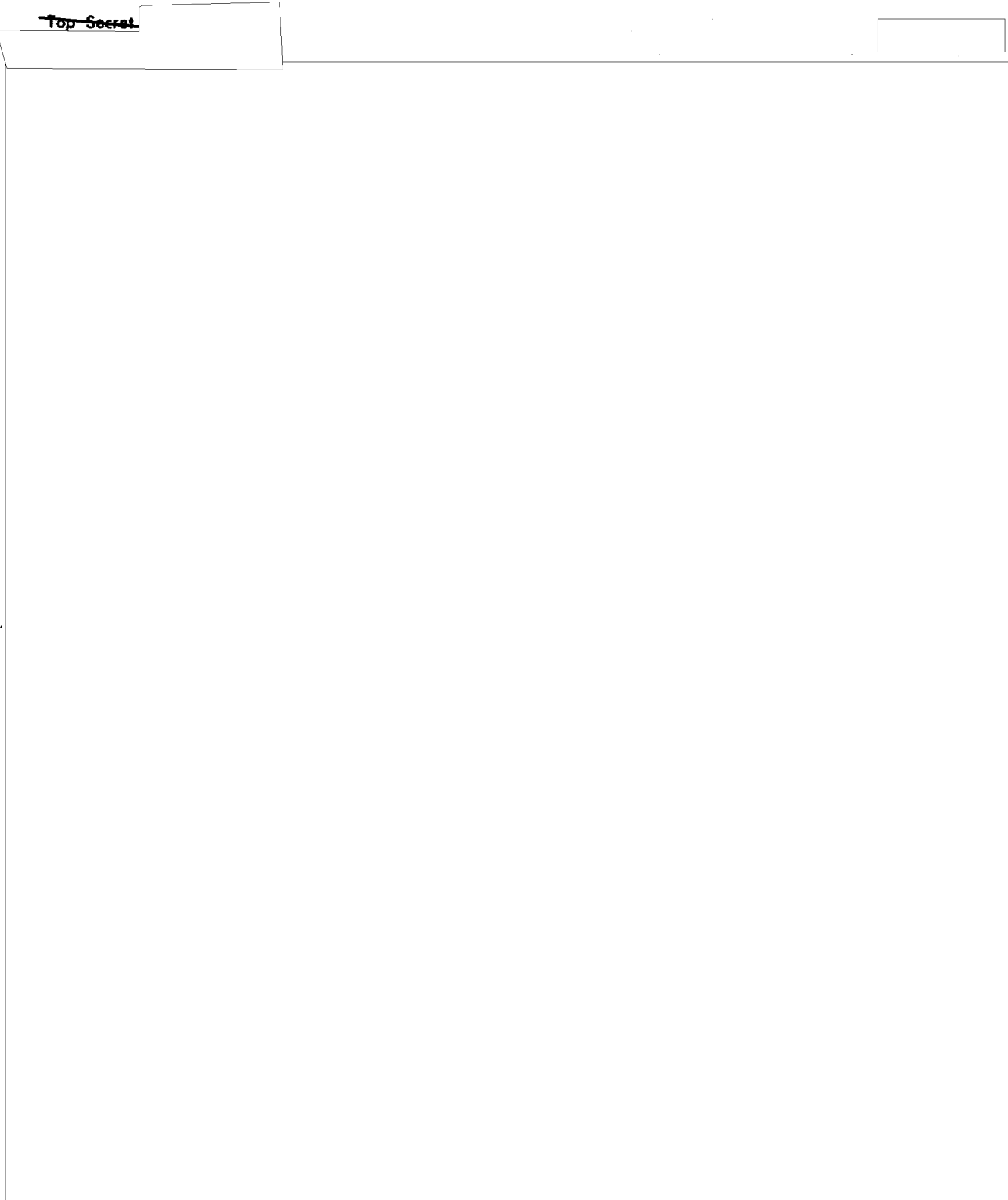


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