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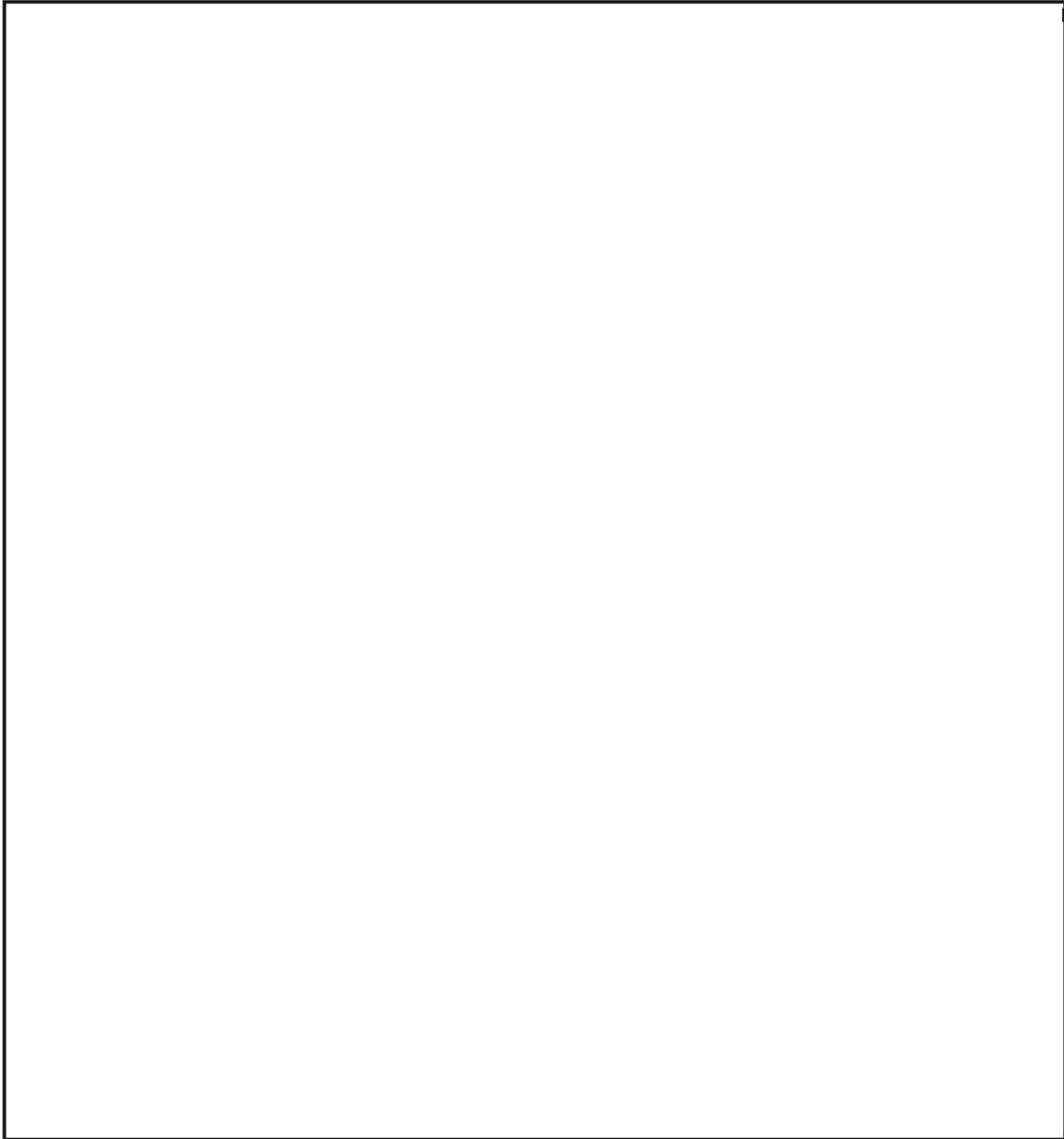
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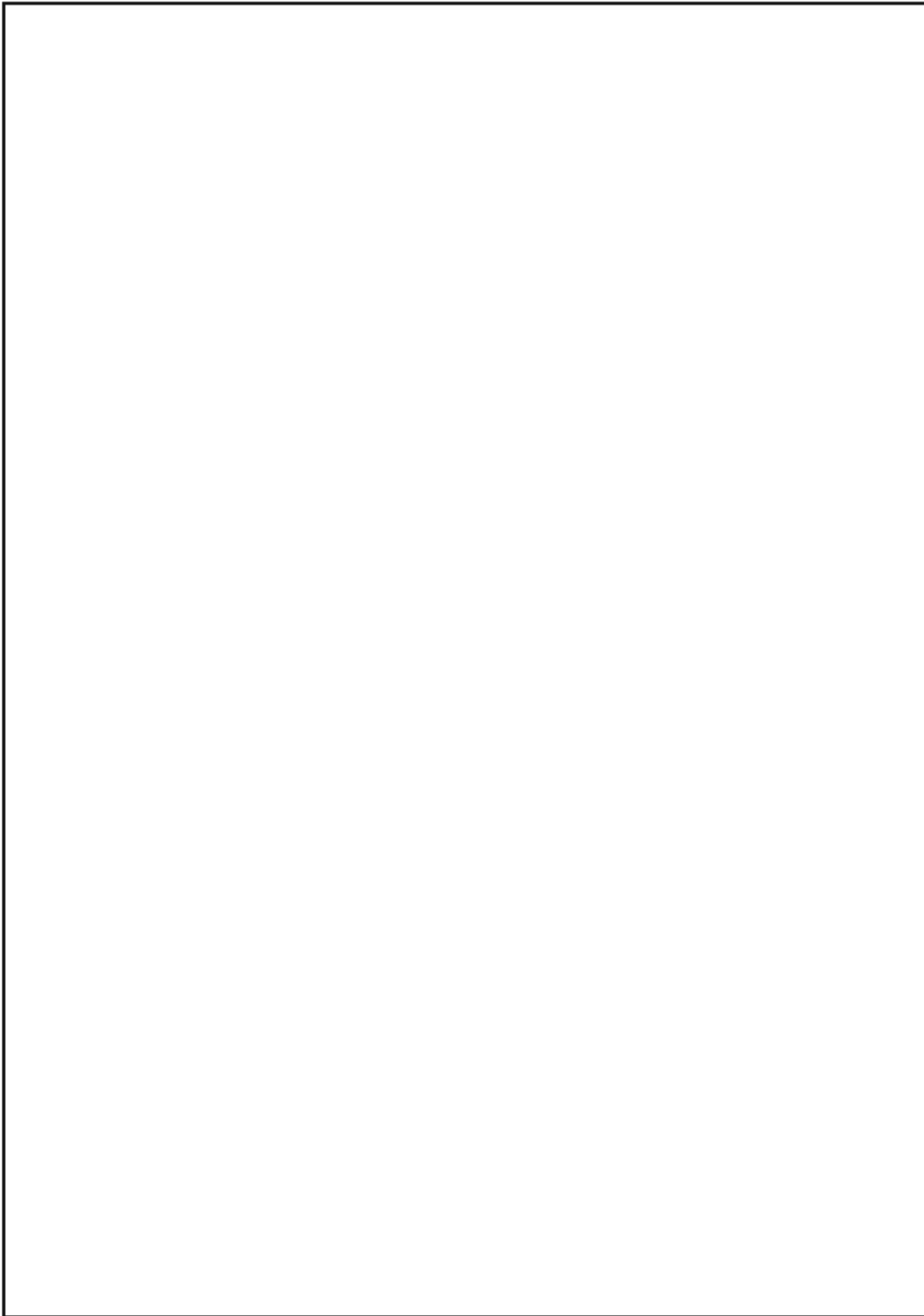
**Maybe You Had to Be There:
The SIGINT on Thirteen Soviet Shootdowns
of U.S. Reconnaissance Aircraft (~~S-CCO~~)**



(b)(3)-P.L. 86-36



Non - Responsive



Non - Responsive



[REDACTED]

In 1958, the Director of Intelligence for the USAF stopped all ACRP flights and requested a detailed evaluation of the entire effort. The purpose was to weigh results of the collection missions around the periphery of the USSR against risks to the aircraft and crews.

[REDACTED] The reason the ACRP flights had been halted was the downing of a USAF C-130 ACRP mission over Armenian USSR by Soviet fighters in September 1958, the tenth such documented shootdown of a U.S. reconnaissance aircraft since 1950.

(U) That brings us to the recent spate of media coverage of the U.S. military's aerial reconnaissance program that was directed against the Soviet Union in the 1950s and 1960s. The extensive television, newspaper, and weekly newsmagazine coverage (starting with newspaper articles⁵ in the summer of 1992 and reaching apogee in 1993 with the ABC Television "PrimeTime Live" feature on 4 March and the extensive coverage in *U.S. News and World Report* on 15 March under the histrionic title "America's Top-Secret Spy War"⁶) emphasized the secrecy surrounding the many shootdowns of U.S. aircraft, the lost airmen, both killed and missing, the few fortunate survivors, their heroics generally and specifically, the U.S. government's less than forthcoming explanations to next of kin and, in some cases, its apparently less than aggressive confrontation of the Soviet government concerning the whereabouts and return of any captured survivors.

(U) The media touched generally and gingerly on the reasons for these missions -- the American fear of the Russian bear, the gap of Allied knowledge of Soviet military and industrial capabilities, the need for intelligence on the strengths and weaknesses of Soviet air defenses and on *what* targets to hit *where* in case of war.

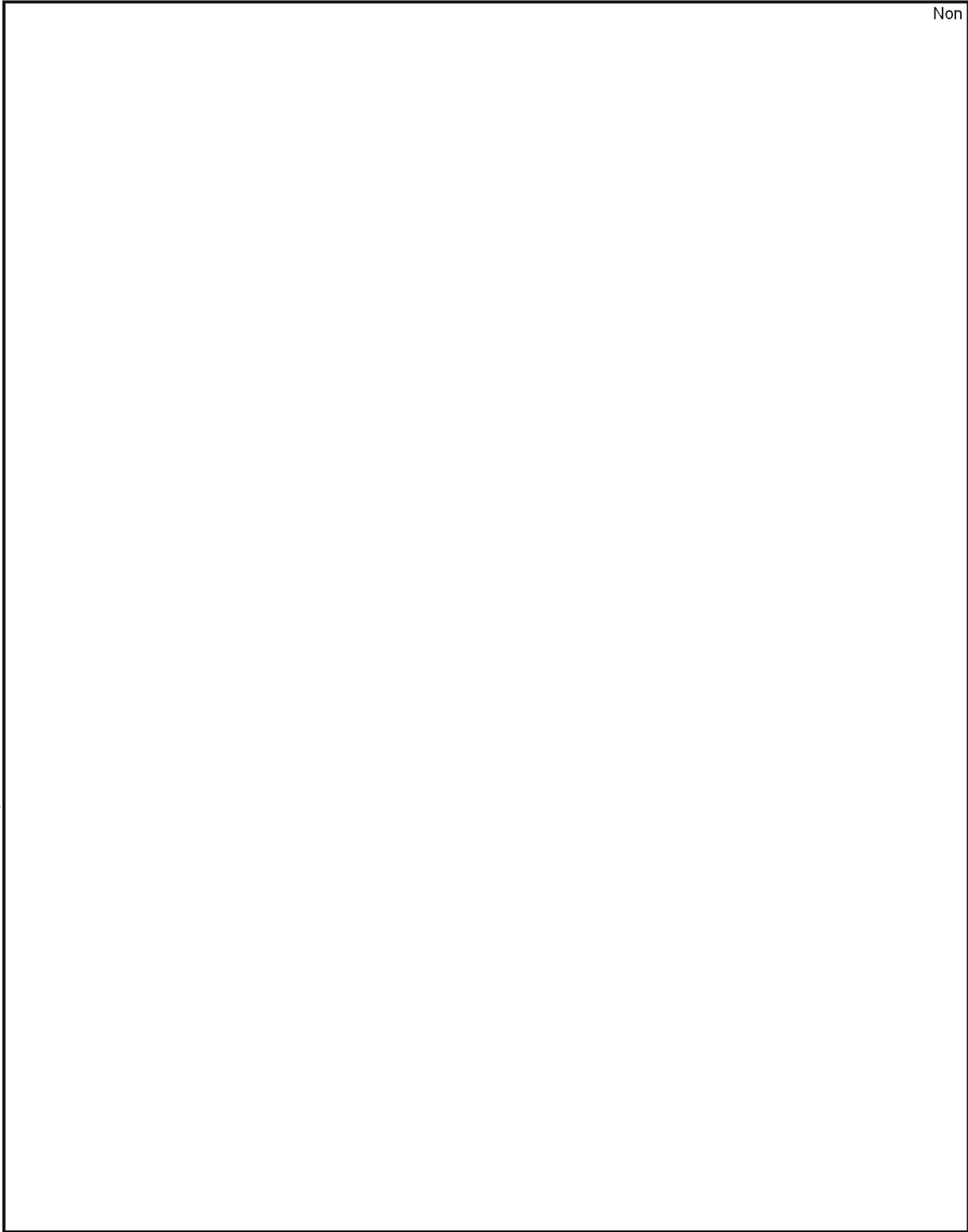
~~(S)~~ What the media didn't emphasize enough, in this author's view, was that these airmen were all volunteers in that secret war. They knew the risks and were willing, in many cases eager, to take them. As early as 1947, the USAF knew the risks:

This mission is considered a most hazardous one both from the natural peril and capture standpoints. All flight personnel are volunteers and are fully apprised of possible consequences should the plane be forced to land in foreign territory. The crew is warned that in the event of detention in foreign territory repatriation will be attempted but will probably be unsuccessful.

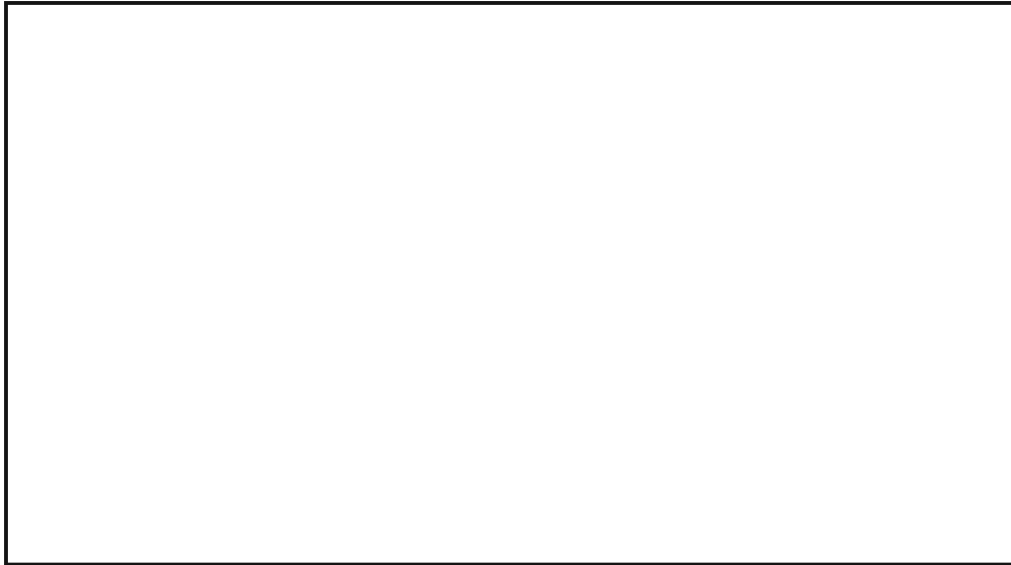
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(b)(1)
(b)(3)-50 USC 403
(b)(3)-18 USC 798
(b)(3)-P.L. 86-36

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QUICK-LOOK SUMMARY OF SOVIET SHOOTDOWNS

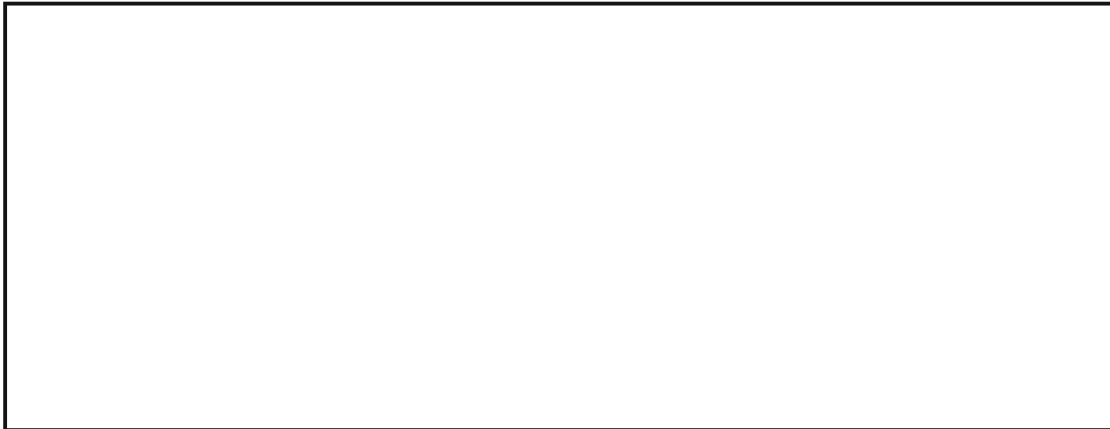


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2 September 1958


USAF C-130

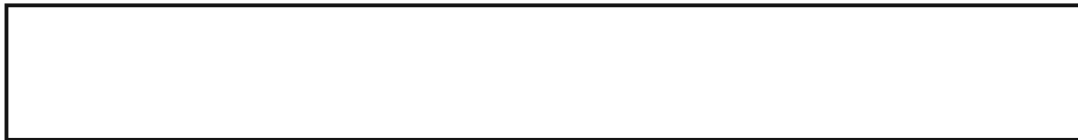
Soviet Armenia (near Turkish border)



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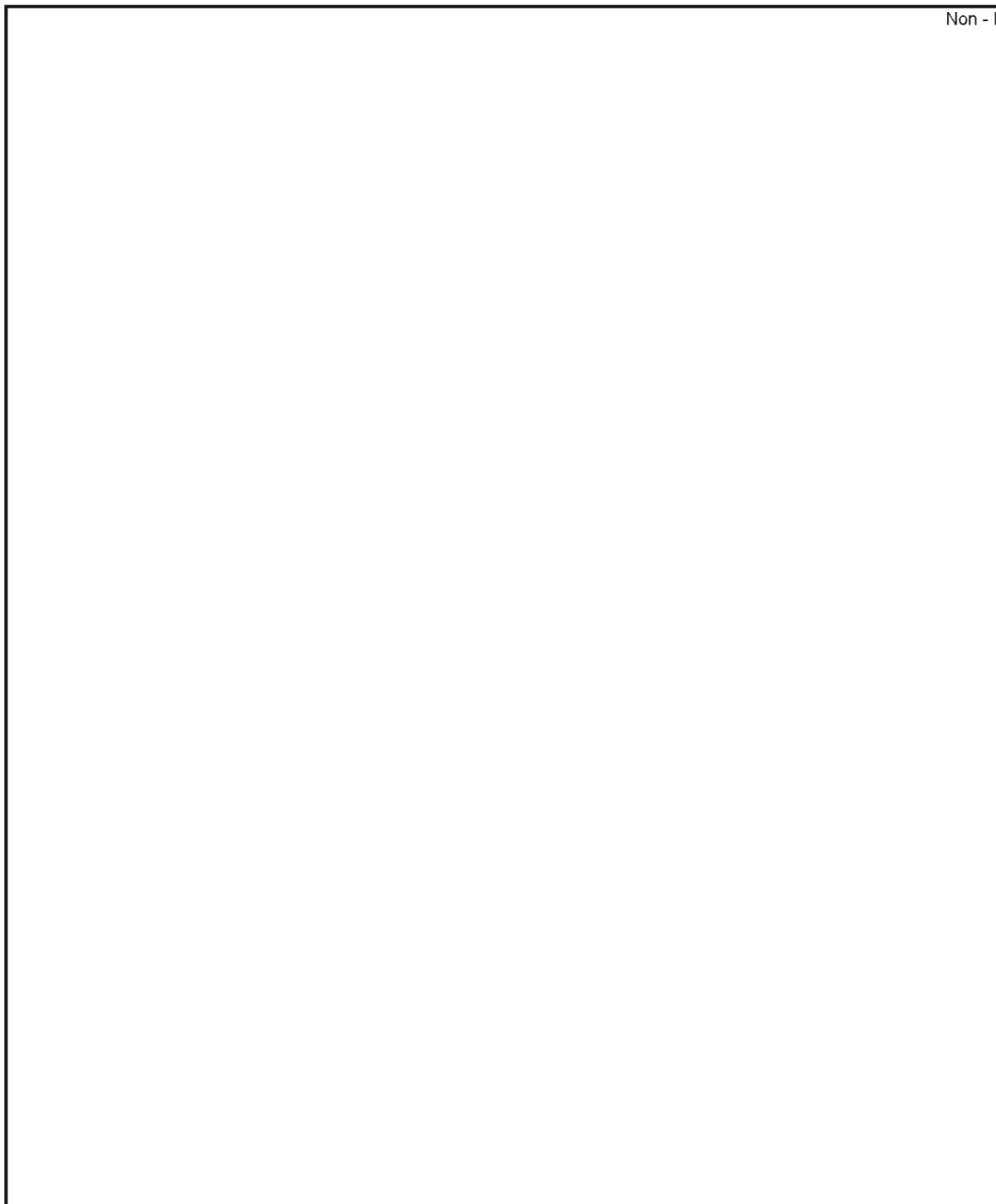
~~(S-CCO)~~ The SIGINT picture of these shootdowns is limited. It does not show the human dimension emphasized by the media. 

 For the most part, SIGINT showed only what the Soviets reported they saw on their radars and what the Soviet fighter pilots and their controllers said they were doing and what they saw happening.



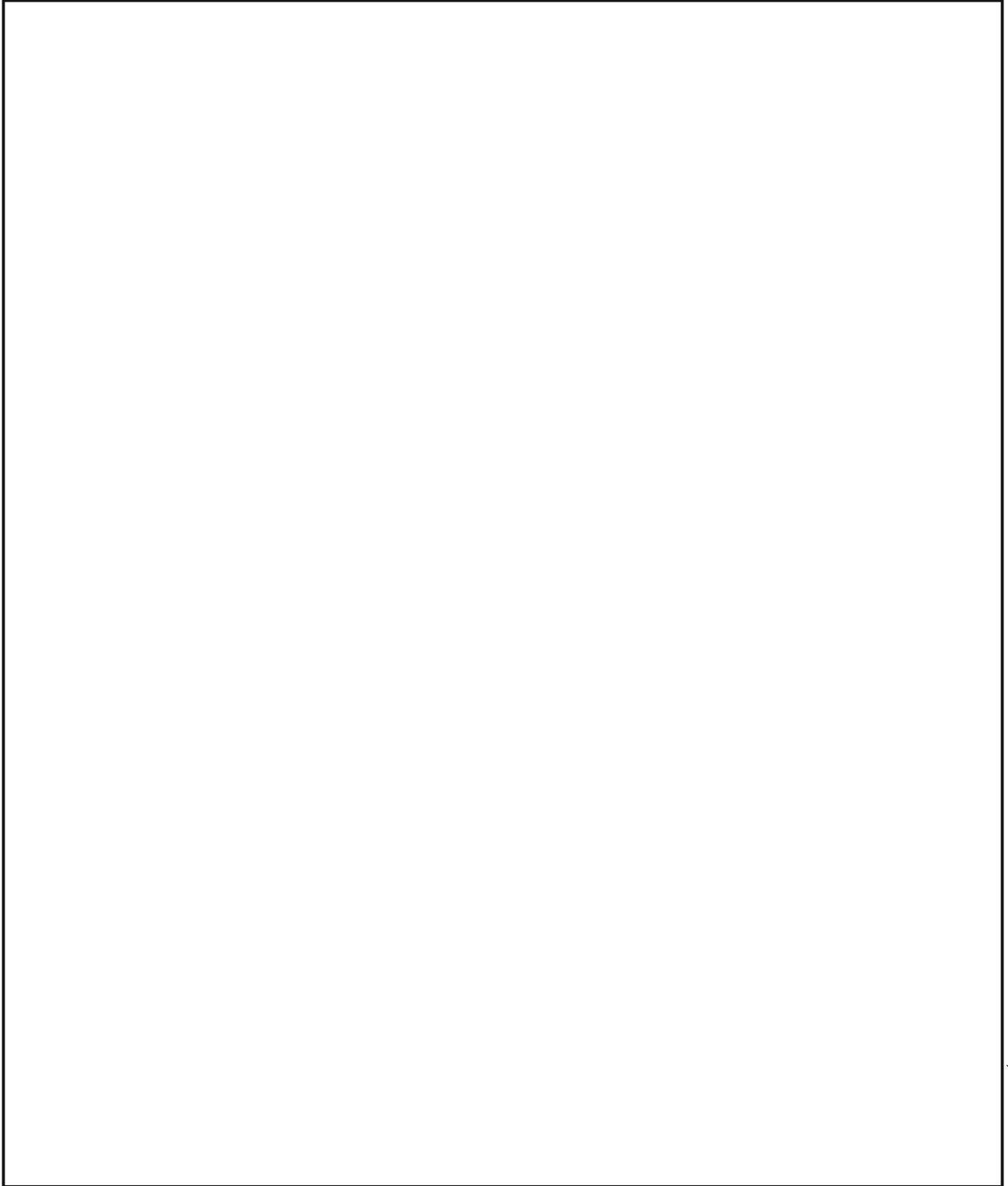
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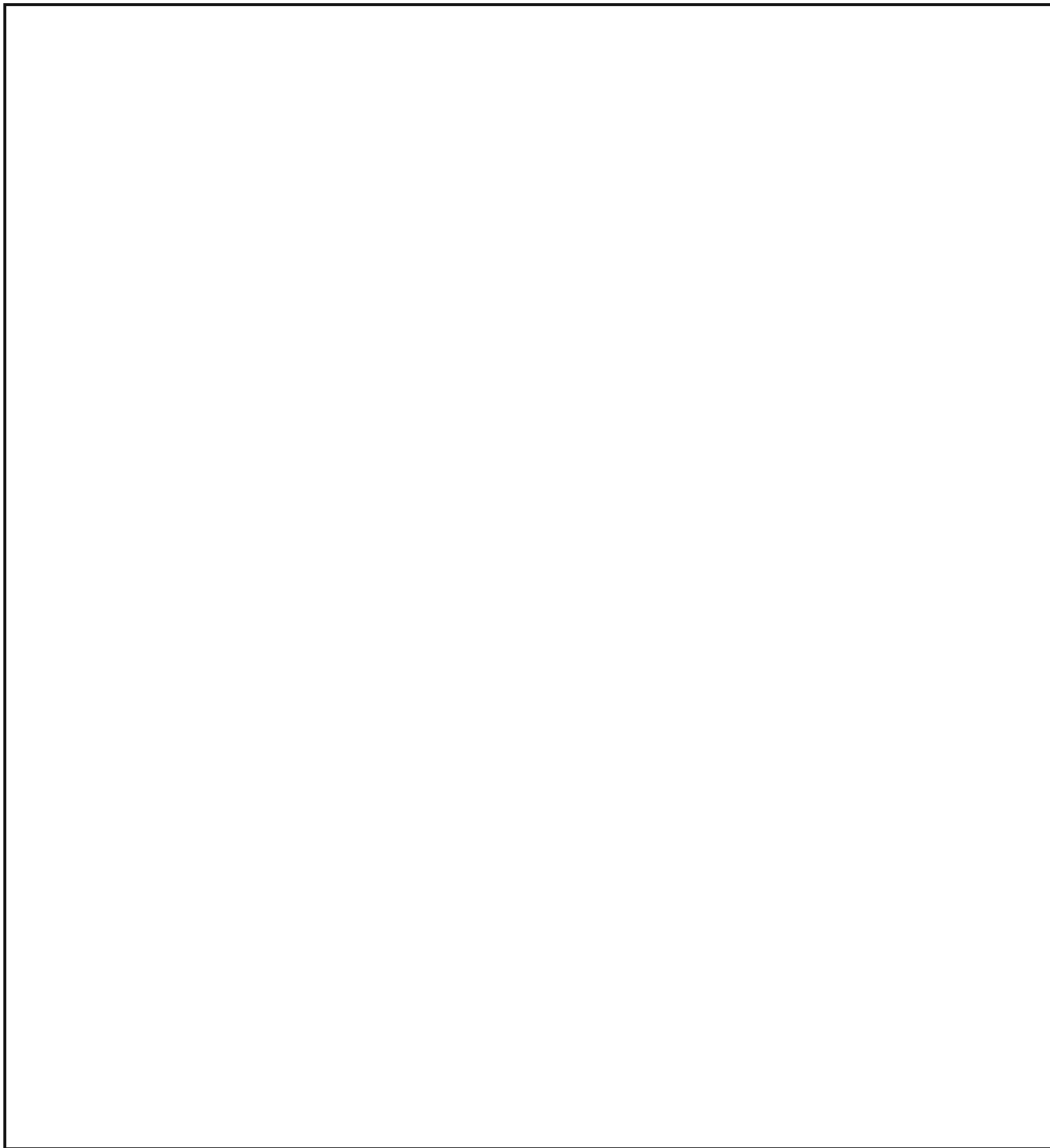


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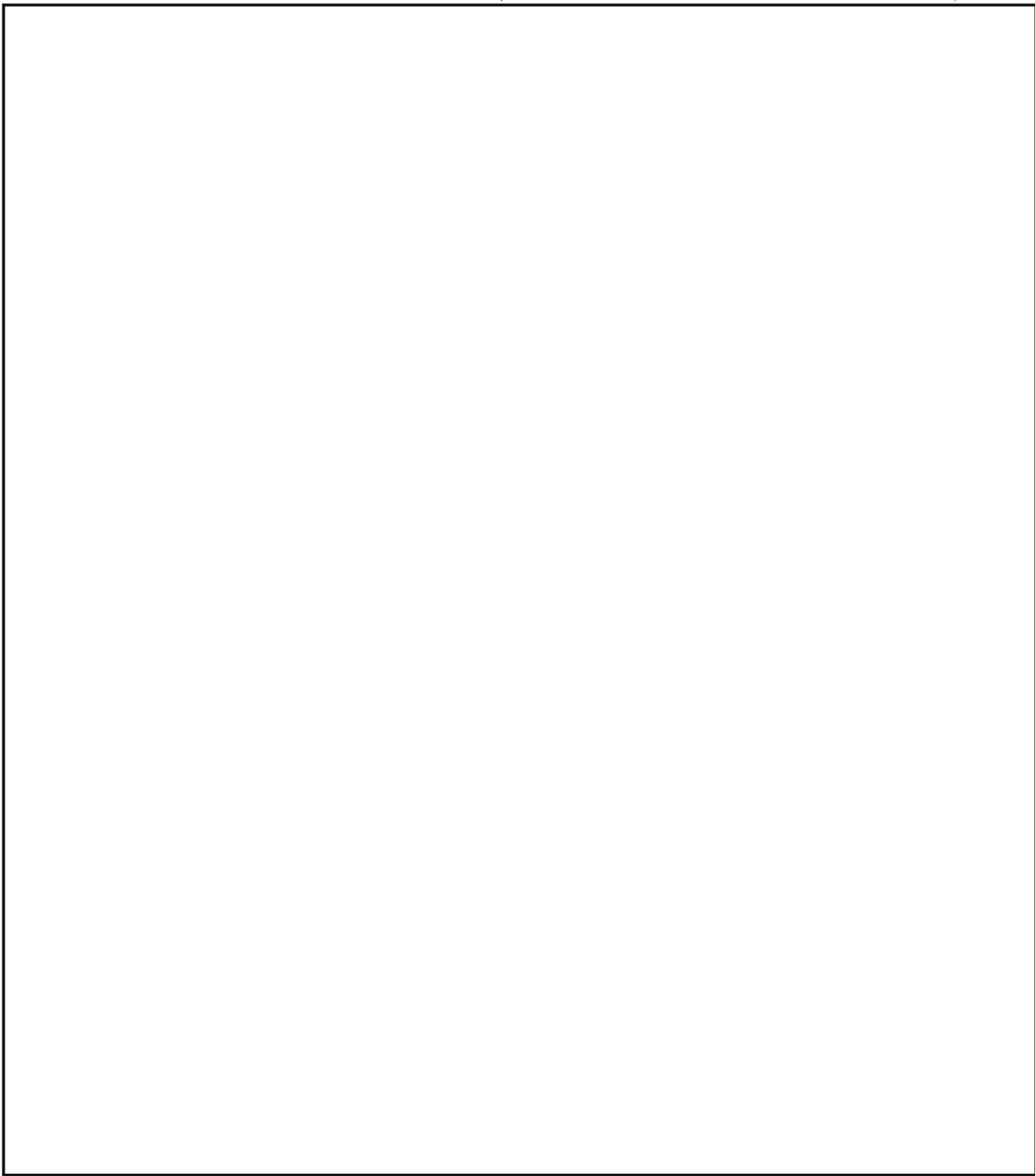


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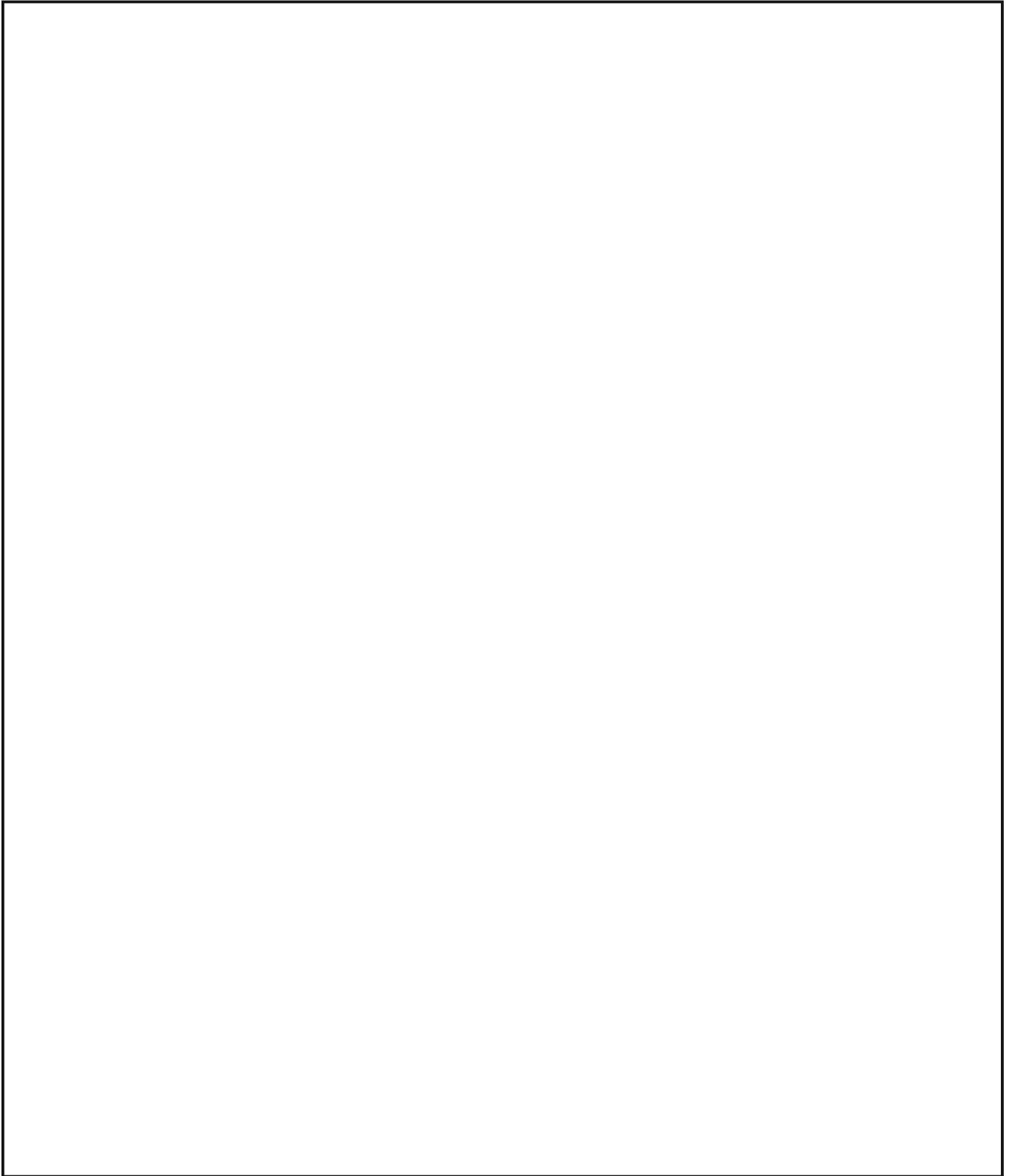


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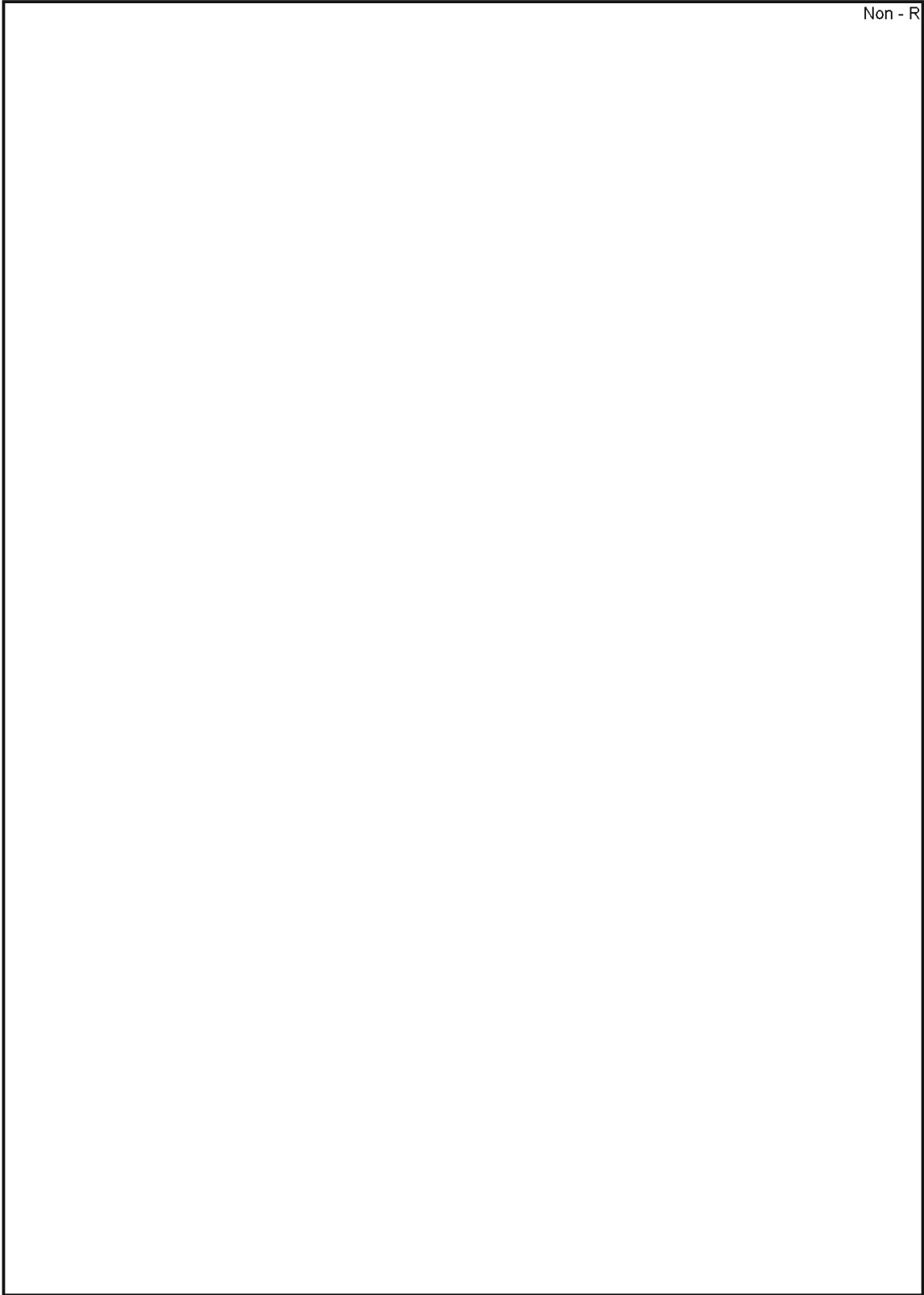
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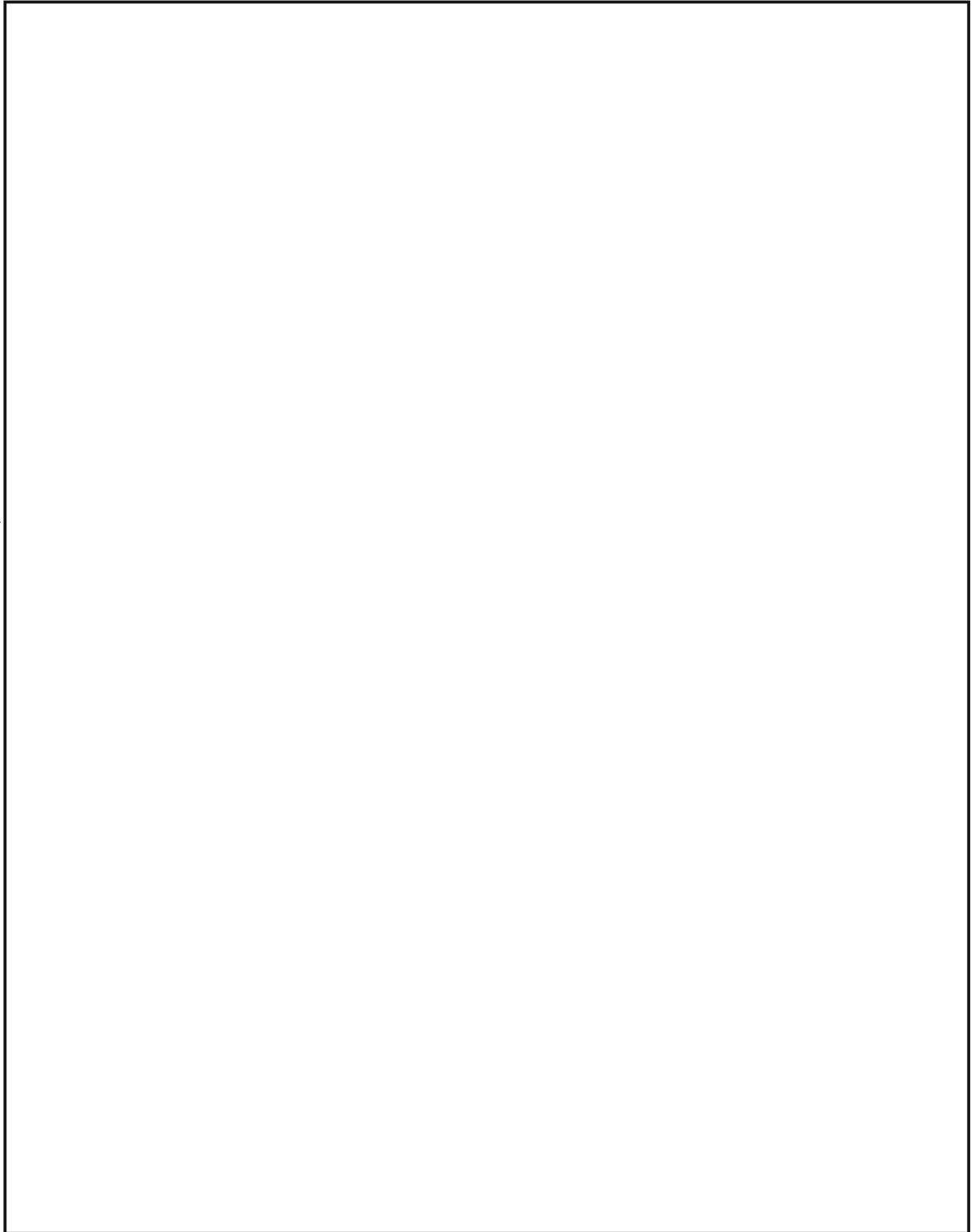
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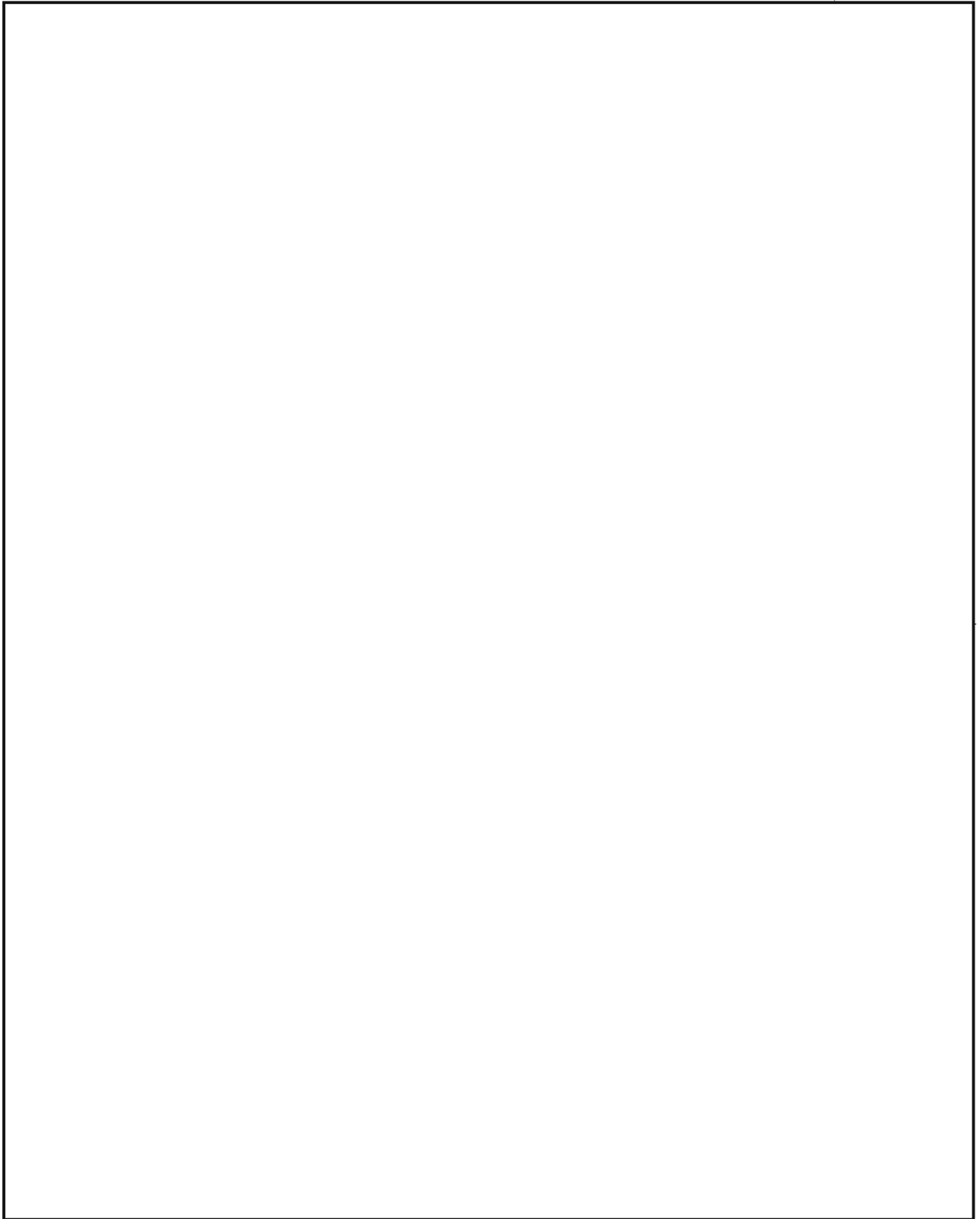


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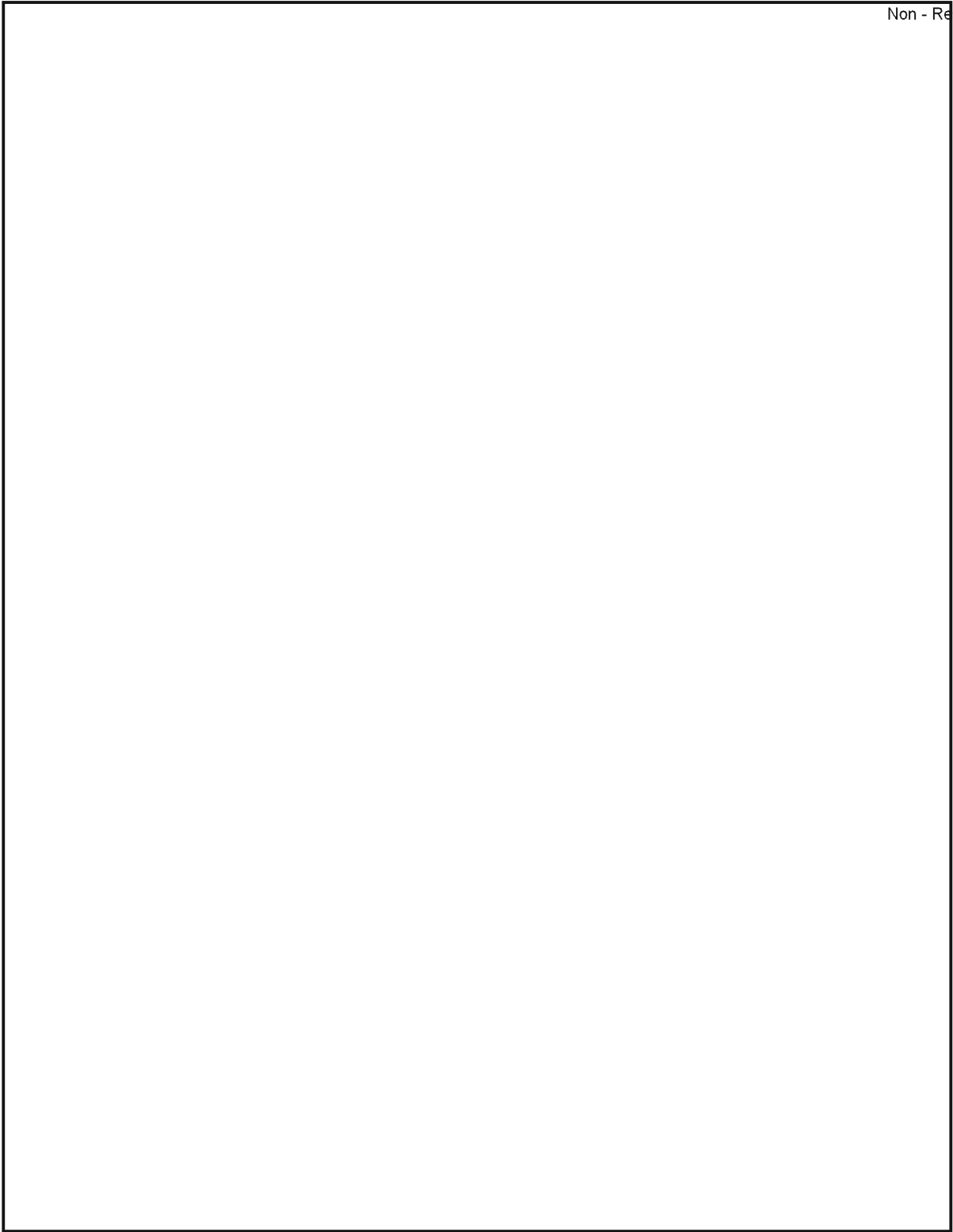
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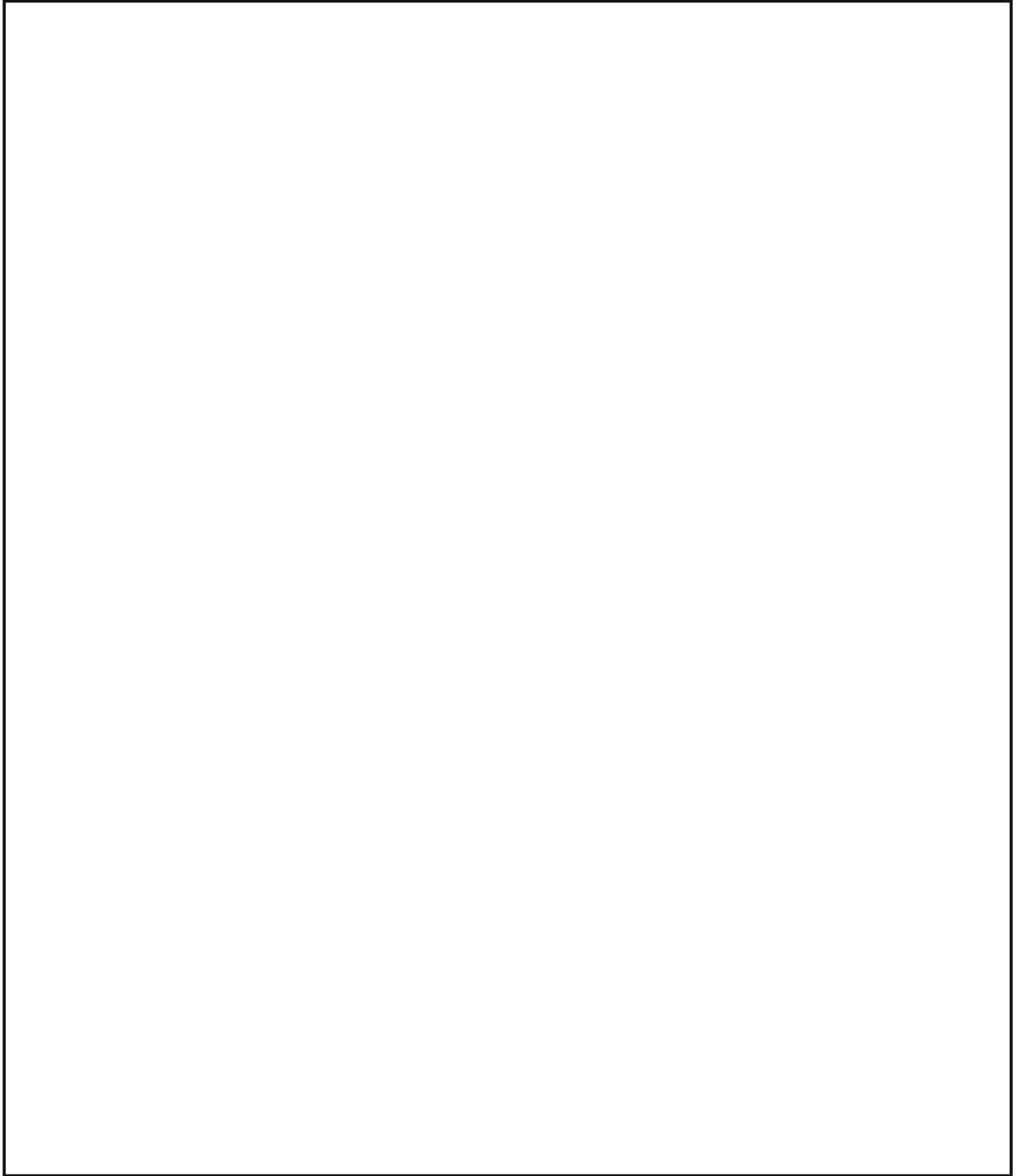
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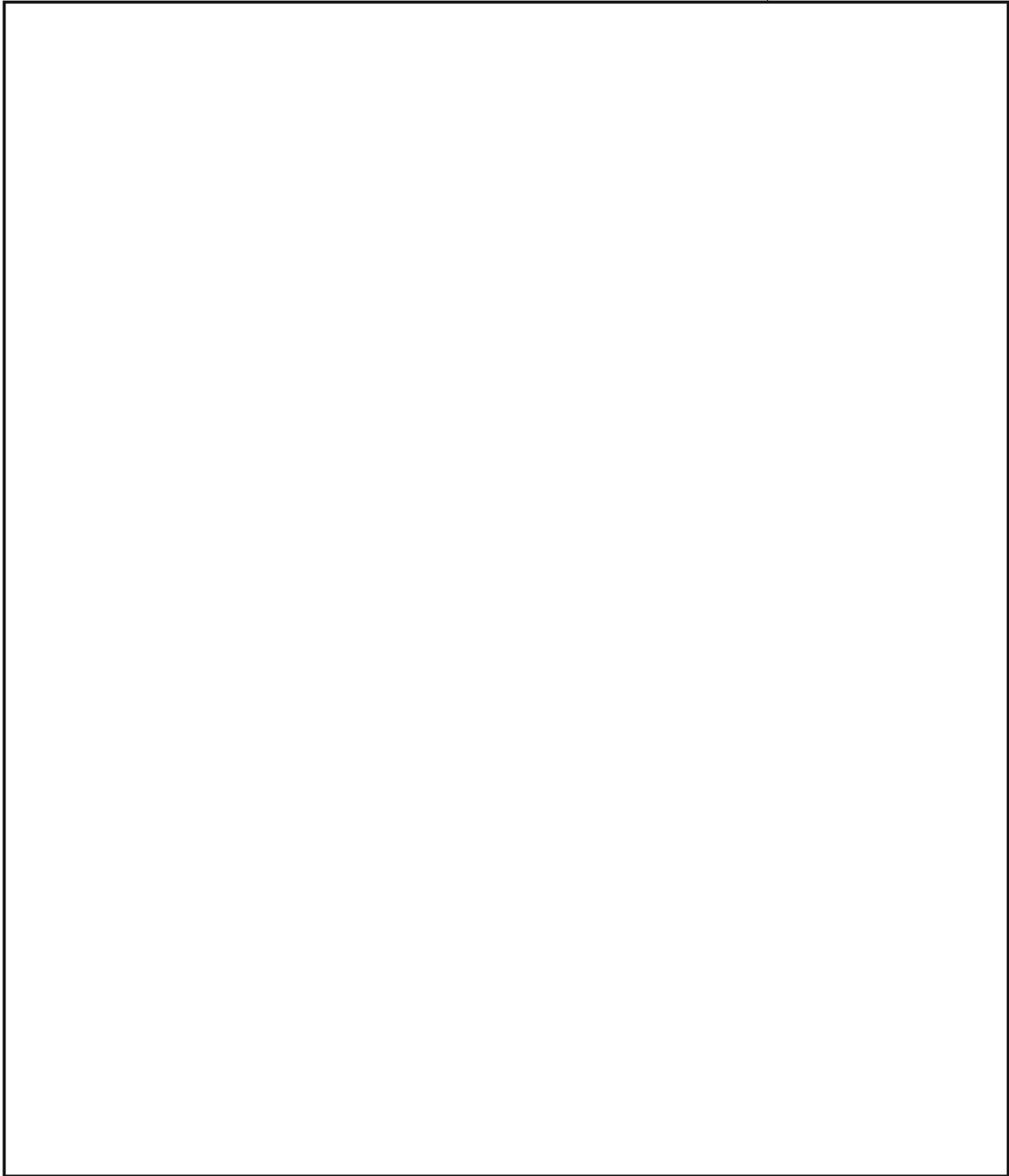


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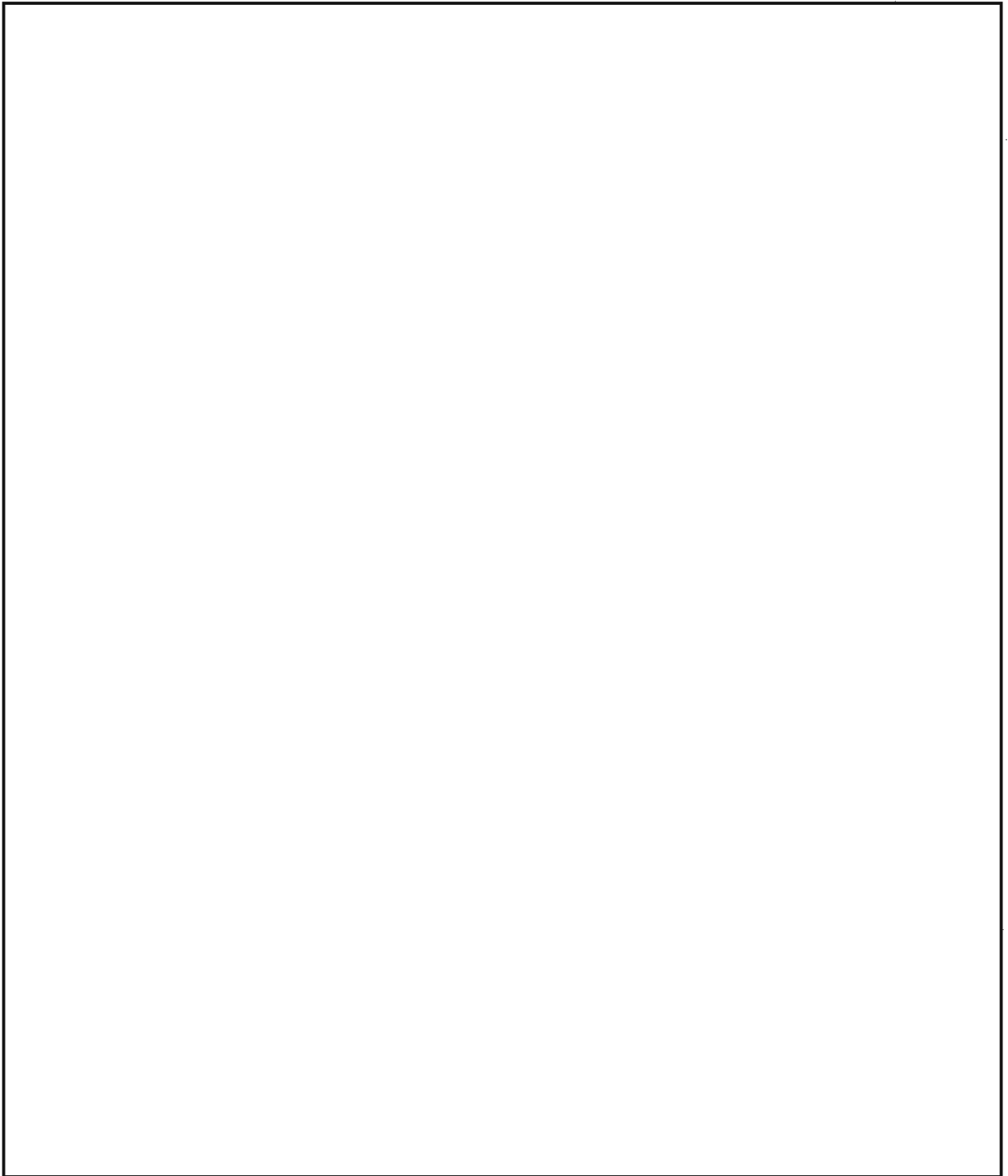
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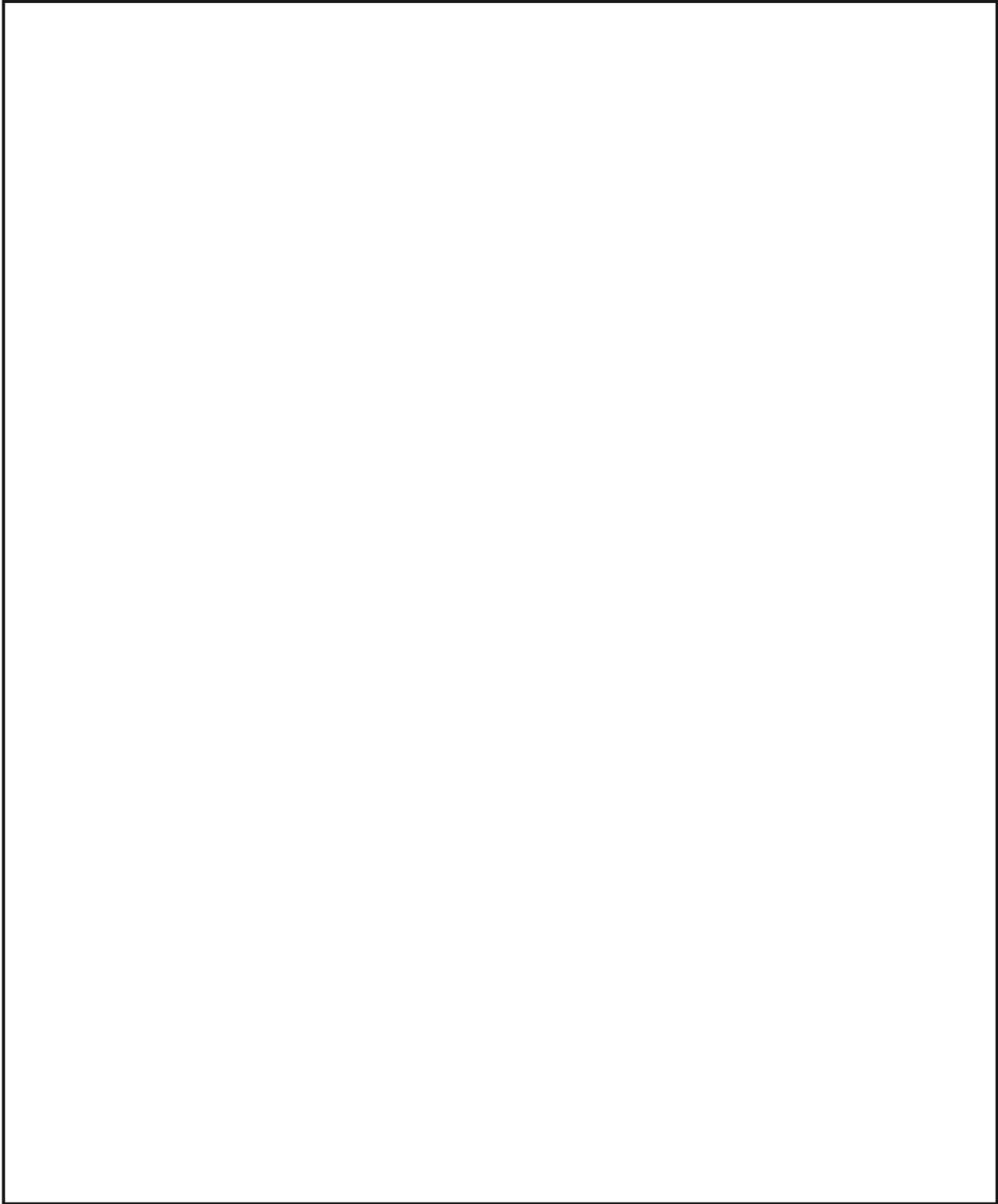


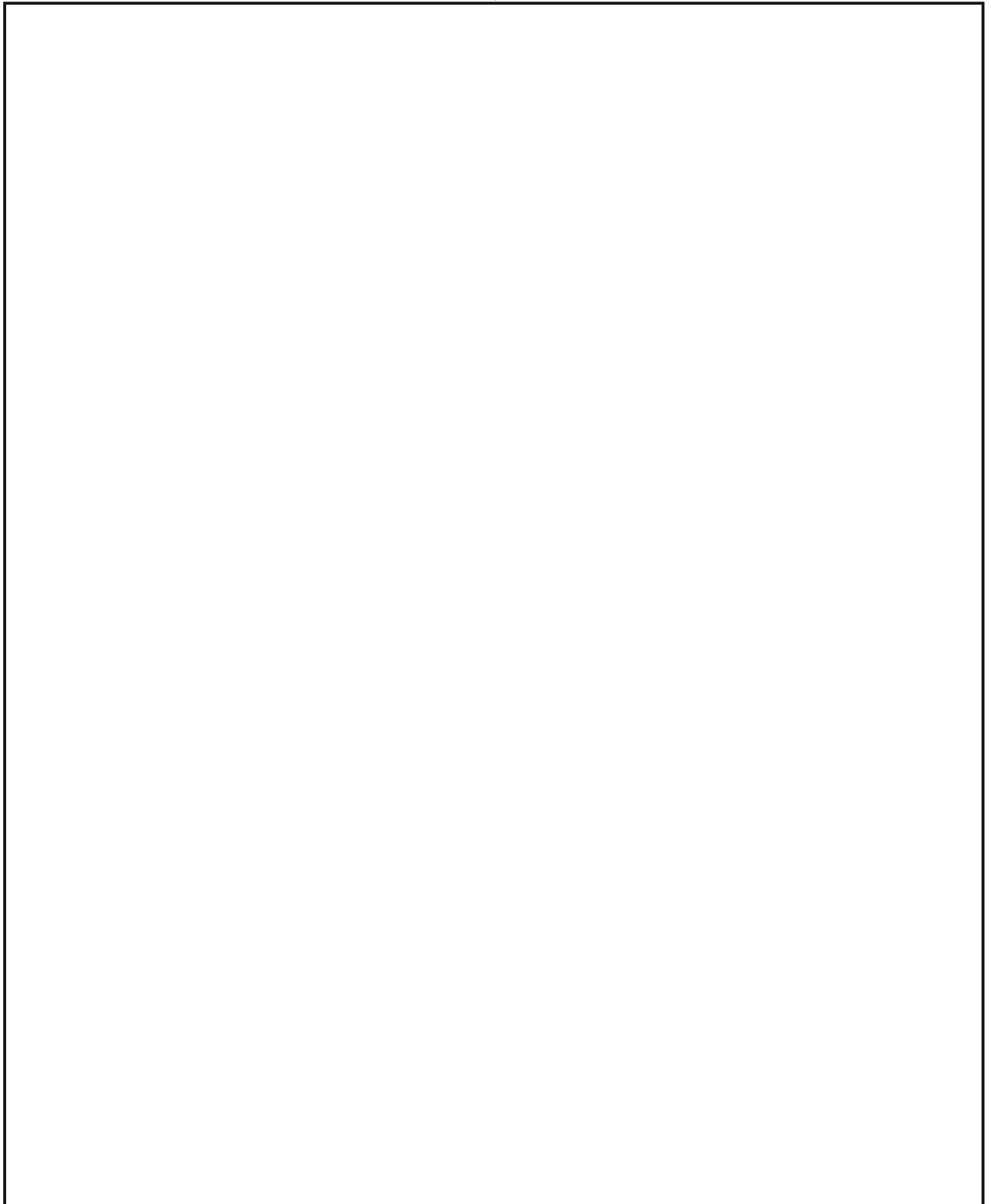
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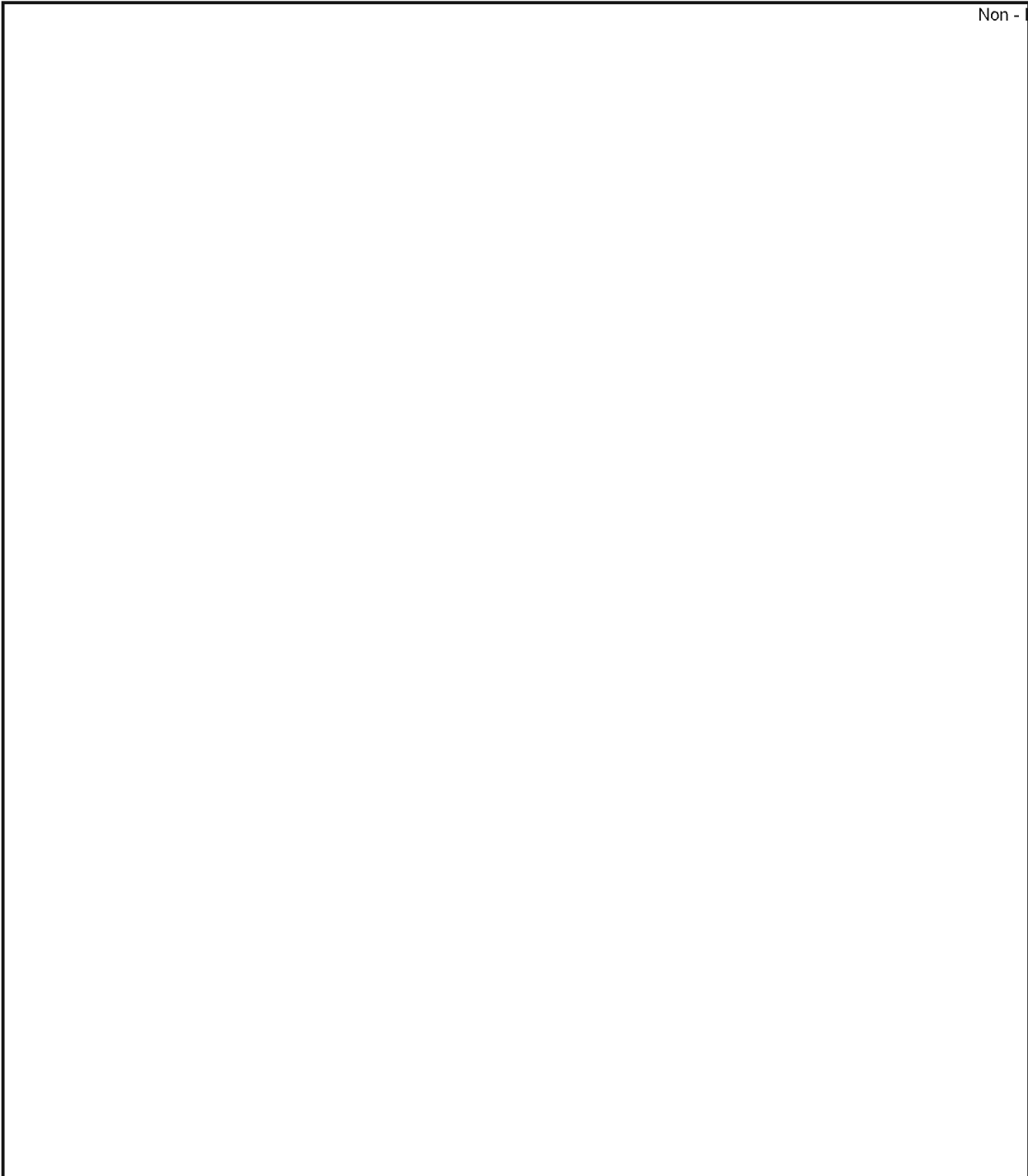
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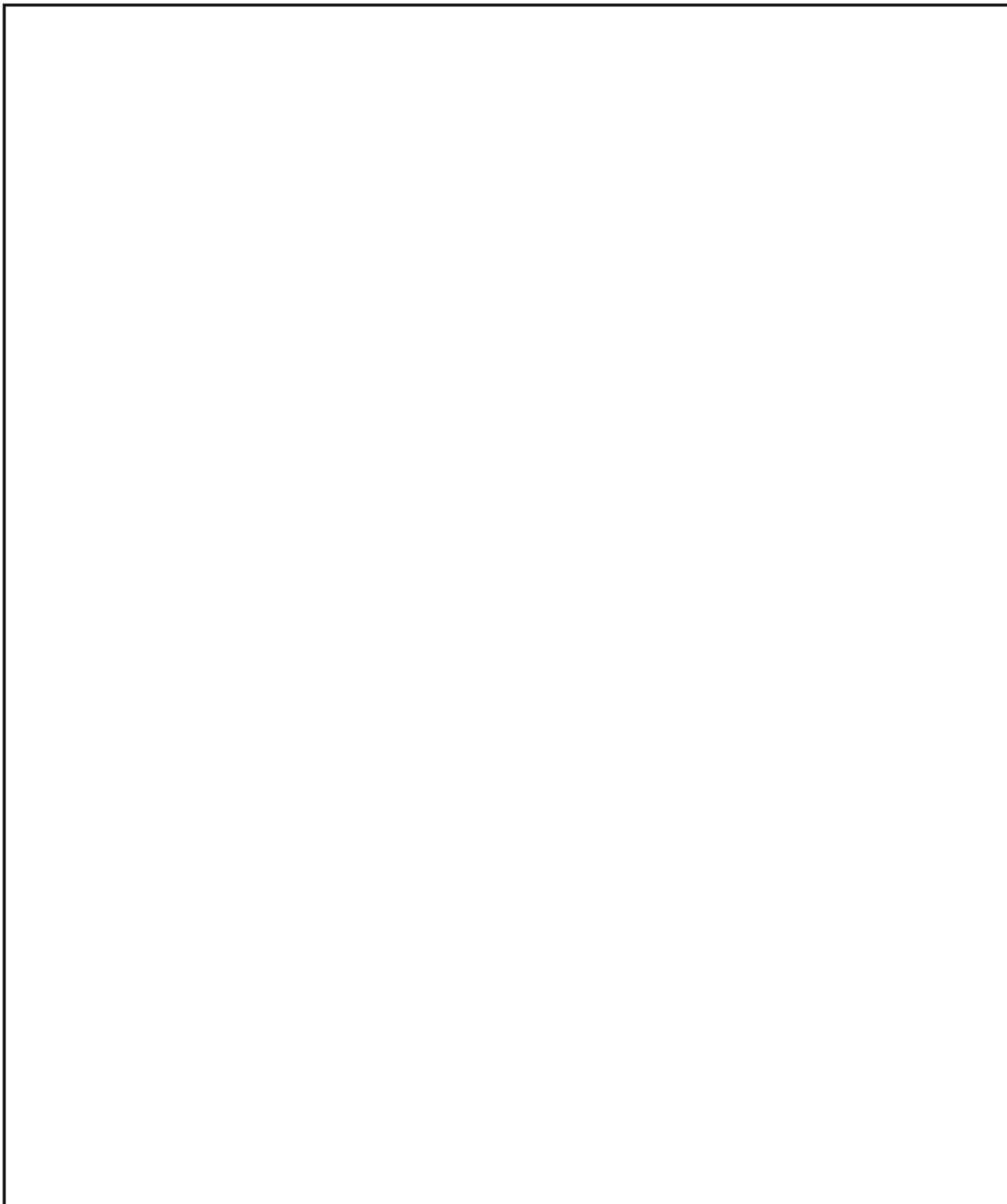


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MAYBE YOU HAD TO BE THERE

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2 September 1958

(U) One of the better-known shootdowns, the tenth in this series, took place on 2 September 1958, in the southwest corner of the Soviet Union. A USAF C-130, with a crew of seventeen, probably accidentally entered Soviet Armenian airspace near the Turkish border, was pounced on by four to six Soviet fighters and brutally shot down.⁶⁵



(b)(1)
(b)(3)-50 USC 403
(b)(3)-18 USC 798
(b)(3)-P.L. 86-36

~~(S)~~ On 2 September 1958, the C-130, carrying a front-end crew of six and eleven USAFSS Russian linguists and collection operators and staging out of Adana, Turkey, was initially detected by Soviet air surveillance radar facilities about thirty-two minutes before the shootdown. Soviet radar tracked the aircraft as it flew generally southeast along the Turkish-Soviet border. About eleven minutes after the C-130 was detected, the first of three flights of Soviet fighters was scrambled for defensive patrols against the transport. Twenty-four minutes after being detected and eight minutes before being attacked, the C-130 mysteriously turned due east and crossed the border into Soviet Armenia (see fig. 14). Soviet ground controllers immediately vectored the second flight of two fighters to the C-130. Then, in a selection of their own words, the Soviet fighter pilots told what happened next:

I see the target, a large one . . . I am attacking the target . . . [B% The target is a transport, four-engine] . . . The target is burning . . . There's a hit! . . . The target is banking . . . I am opening fire . . . The tail assembly [B% is falling off] . . . Look at him, he will not get away, he is already falling . . . He is falling . . . The target has lost control, it is going down . . . The target has turned over . . . The target is falling . . ."⁶⁷

~~(S)~~ Although the available historical record is not clear about what COMINT site knew what COMINT when,

[redacted] should have been, therefore, immediately available to the SIGINT system.

[redacted]

But the tracking data were sufficient to determine the basic outline of the tragedy. As the C-130 crossed the border into Soviet Armenia, its identification was changed [redacted]

[redacted] As the tracking of the second flight of fighters merged with the C-130 track, the fighters were labeled as [redacted] and the C-130 was classified as [redacted]

[redacted] Shortly after the attack, Soviet air warning facilities broadcast a message indicating "target destroyed."⁶⁸

(b)(1)
(b)(3)-50 USC 403
(b)(3)-18 USC 798
(b)(3)-P.L. 86-36



Fig. 13. USAF C-130

(U) According to several accounts,⁶⁹ the fate of the plane and its seventeen-man crew was unknown for several days. On 6 September, the United States asked both the Soviet and Iranian governments if they had any information on their whereabouts. On 12 September, after earlier claiming to know nothing about the aircraft, the Soviet government informed the American embassy in Moscow that "a USAF aircraft has been found 55 kilometers northwest of Erevan in Soviet Armenia . . . the remains of bodies were found from which it is possible to assume that six members of the crew perished."⁷⁰

(U) The next day, 13 September, the American charge d'affaires in Moscow requested information on the remaining eleven crewmembers, adding that the USAF had information that the plane had been intercepted by three Soviet fighters, "that following the interception the plane proceeded eastward under the control of the Soviet aircraft, and that shortly after this an explosion was heard and a large column of smoke was observed rising at a point within Soviet territory." The Soviets returned the six bodies (on 24 September), but denied that the C-130 had been shot down and claimed to have no further knowledge of the incident.⁷¹ Despite the denial, on 19 and 20 September the Soviet newspaper *Sovetskaya Aviatsiya* published what Agency analysts believed was an actual account of the shootdown, disguised as a practice exercise.⁷²

(b) (1)

~~(S-CCO)~~ Finally, on 22 September came the first indication that VHF tactical air-ground voice communications had been intercepted [redacted]

[redacted] Four days later, two reels of tape recordings arrived; the second reel proved to be blank.⁷⁴ [redacted]

~~(S-CCO)~~ Two weeks later, forty-three days after the shootdown, NSA published a comprehensive COMINT report, providing detailed tracking information, discussion of the voice material, an analysis of the newspaper article, and a chart (see fig. 14) of the tracking data.⁷⁶ [redacted] It appears that there were differences, as there often are in SIGINT, between [redacted] [redacted] heard and transcribed. Through the last two weeks of October 1958 and into early November, views were exchanged and tapes were retranscribed many times.⁷⁷

~~(S)~~ Following several meetings between NSA and State Department representatives to resolve differences between [redacted] versions of the incident and to agree on a sanitized version of the transcript for release to the Soviet Union and to the press, the State Department on 13 November presented the Soviet ambassador to Washington with the evidence that Soviet fighters had shot down the C-130 "without regard to the rules of civilized international practice."⁷⁸ The Soviet ambassador accepted the transcripts but refused to listen to the tape recordings. Additional representations to the Soviet government as to the whereabouts of the eleven unaccounted-for crewmen were each time rebuffed. As late as 16 January 1959, no lesser official than the First Deputy Chairman of the Council of Ministers of the USSR, Mr. Anastas I. Mikoyan, denied that the plane had

been shot down and insisted that his government had no knowledge of the eleven missing crewmen.⁷⁹

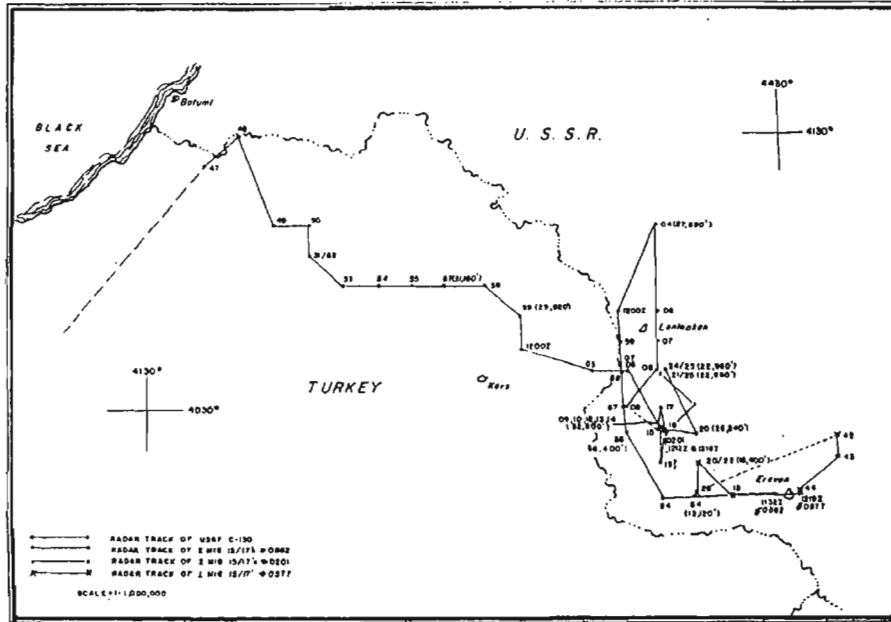


Fig. 14. USAF C-130 Shootdown - 2 September 1958

(S) Meanwhile, as early as 5 September 1958 USAF Europe removed all C-130s from ACRP missions "until further notice" (that lasted until 15 October), and curtailed the flight routes [redacted] Headquarters USAF ordered a total reevaluation of the ACRP effort. [redacted]

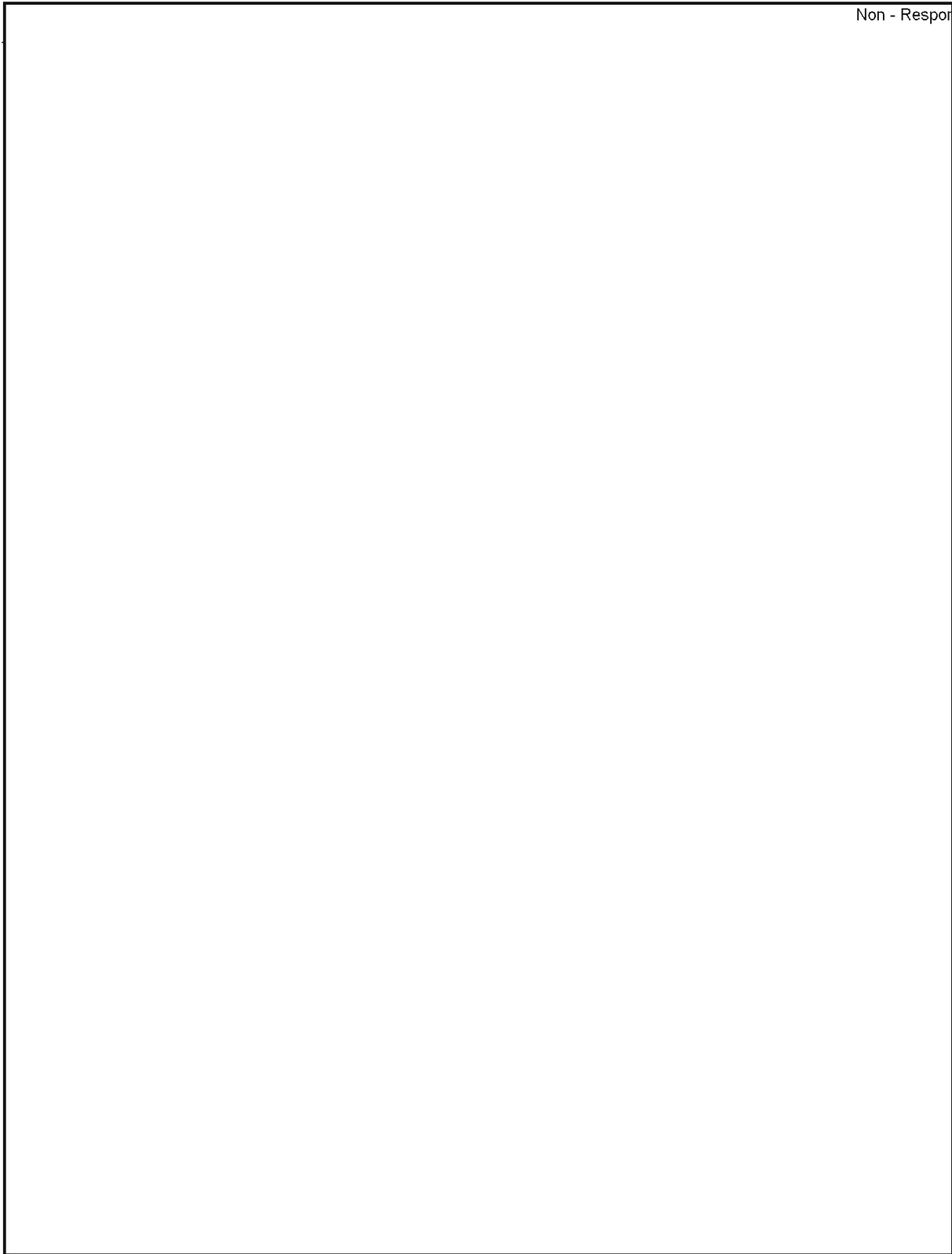
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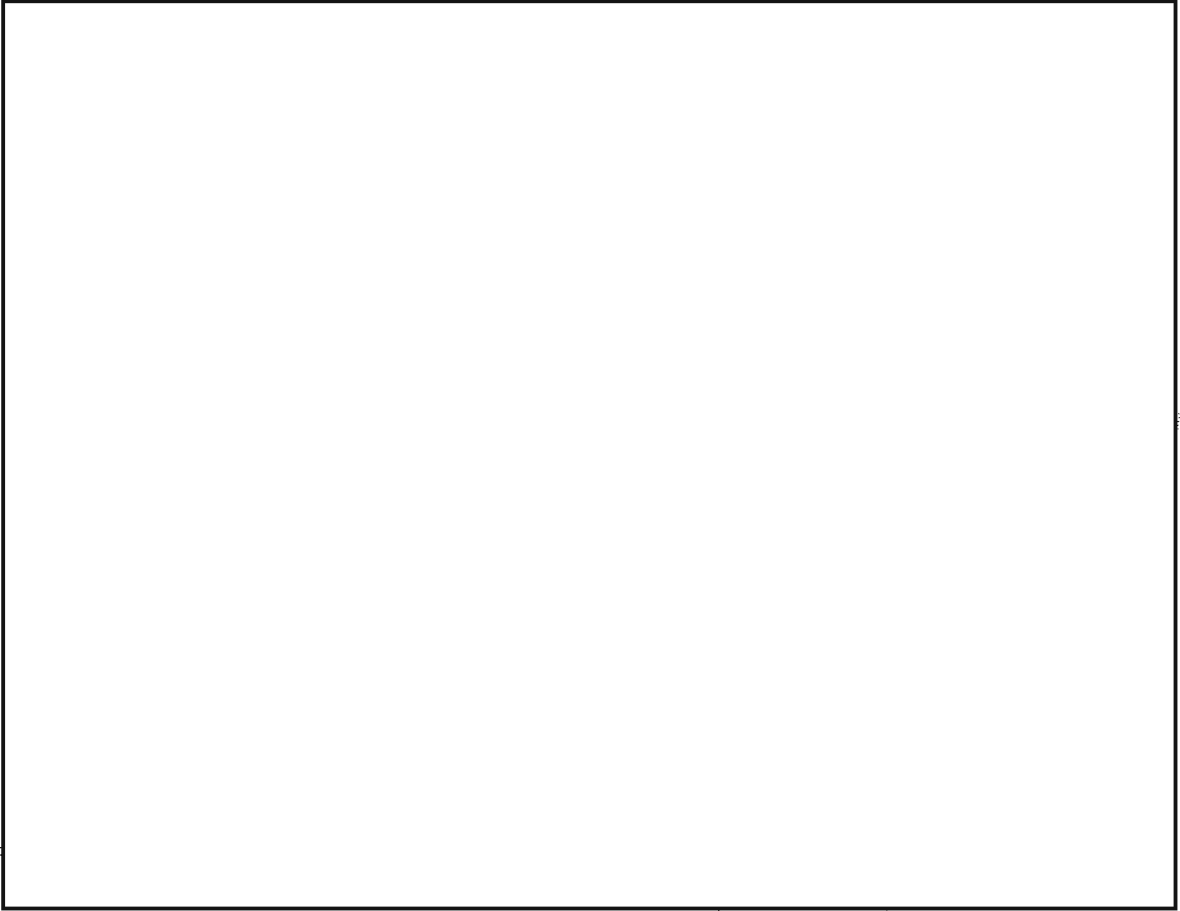
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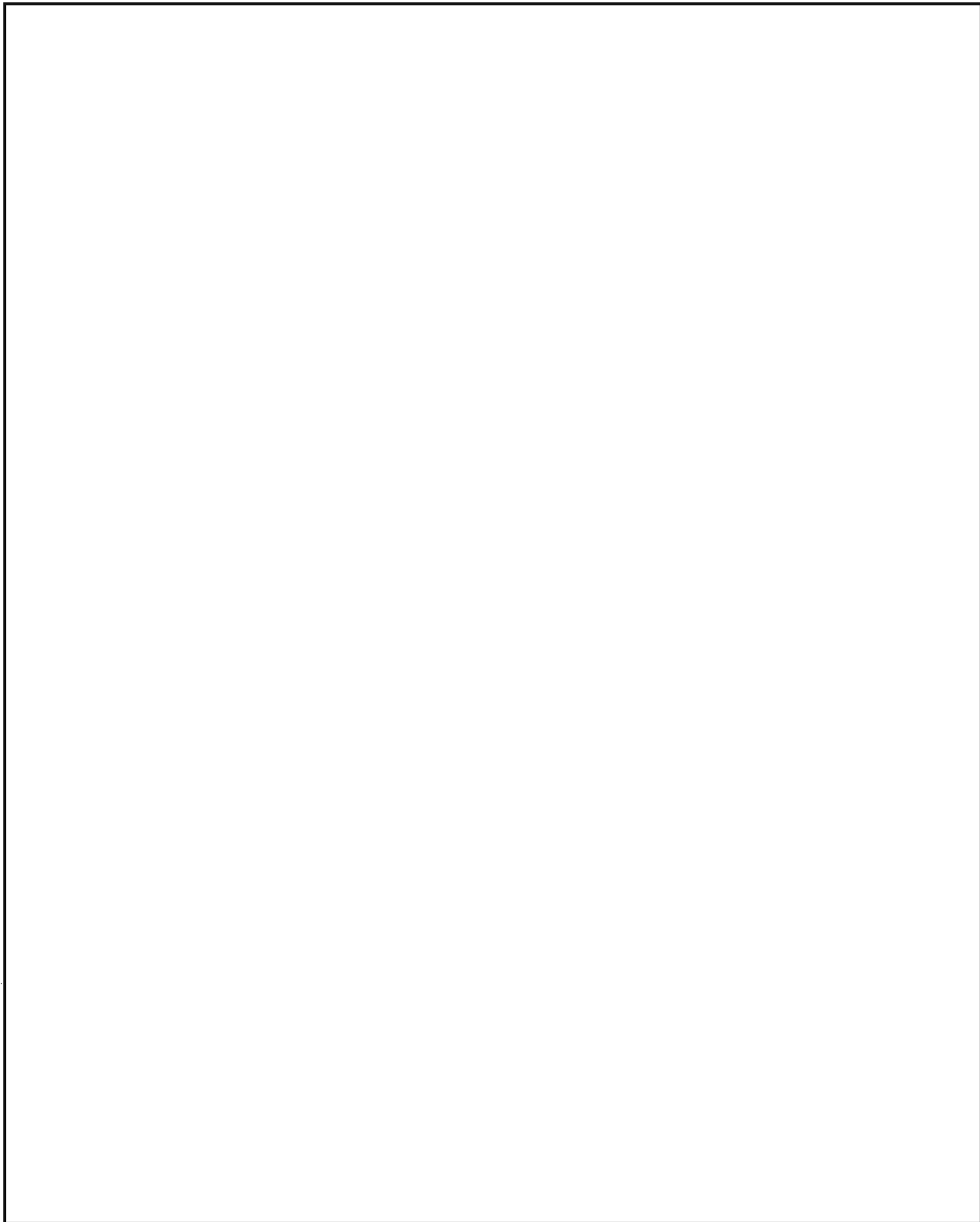
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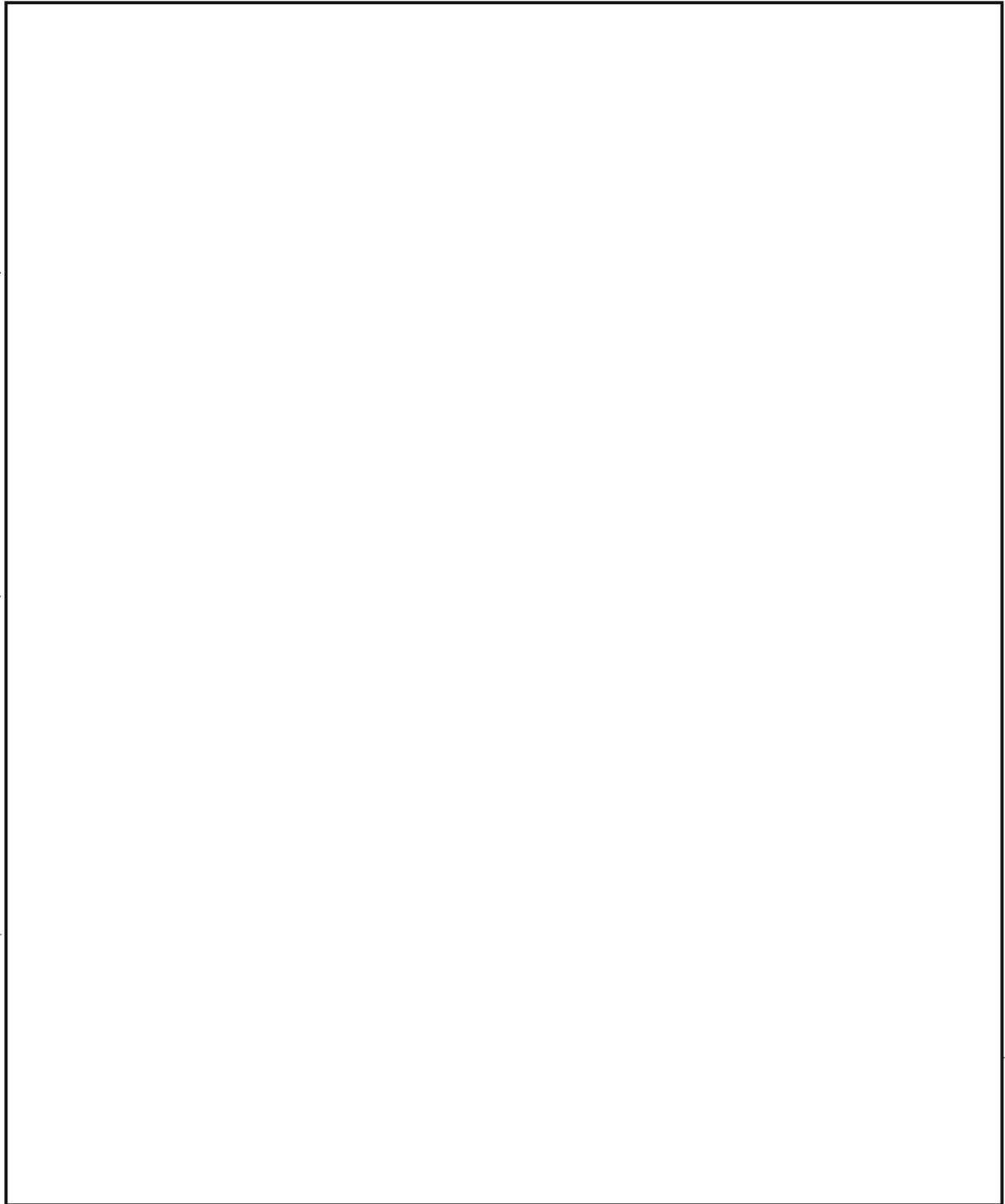


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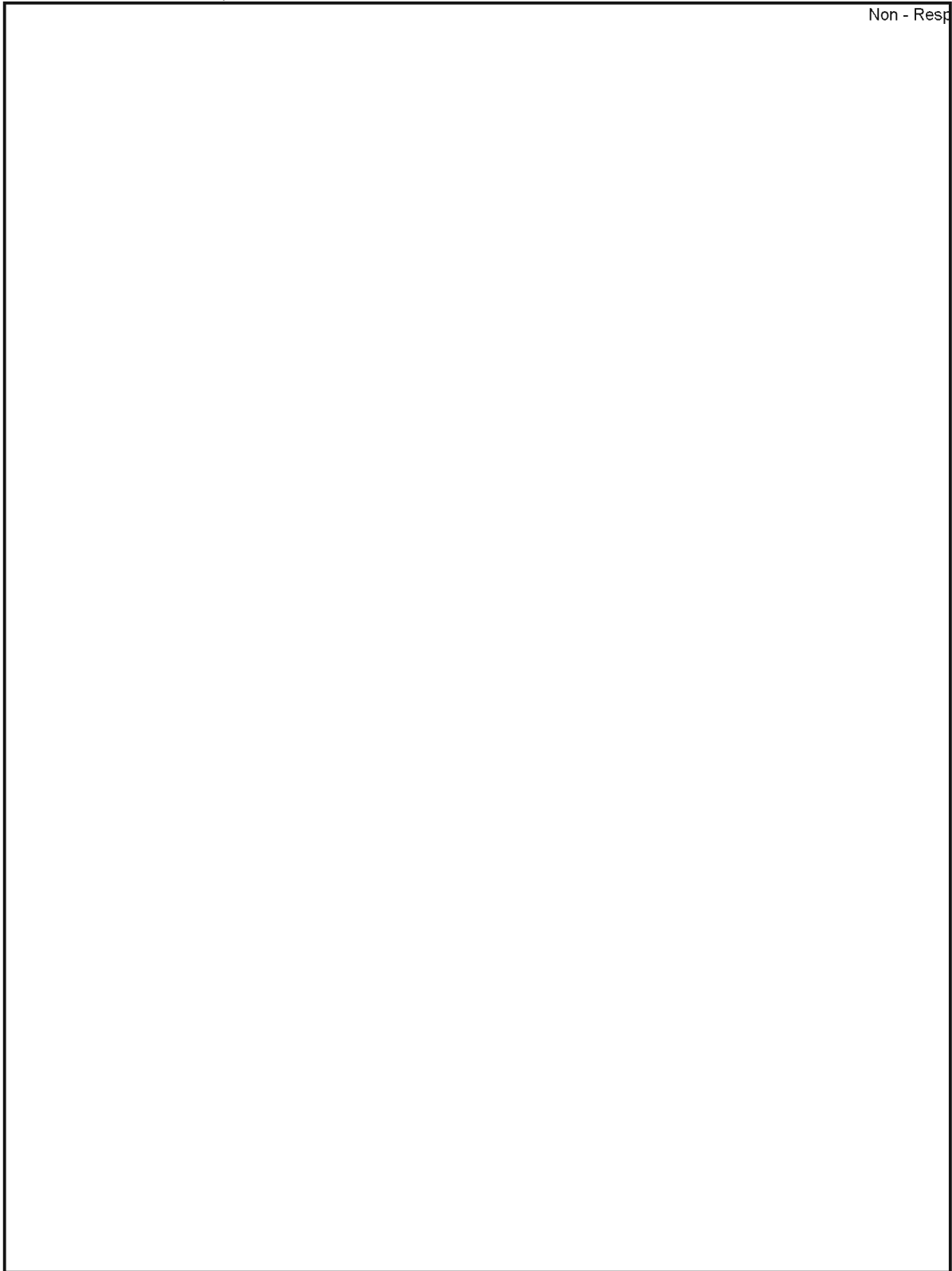
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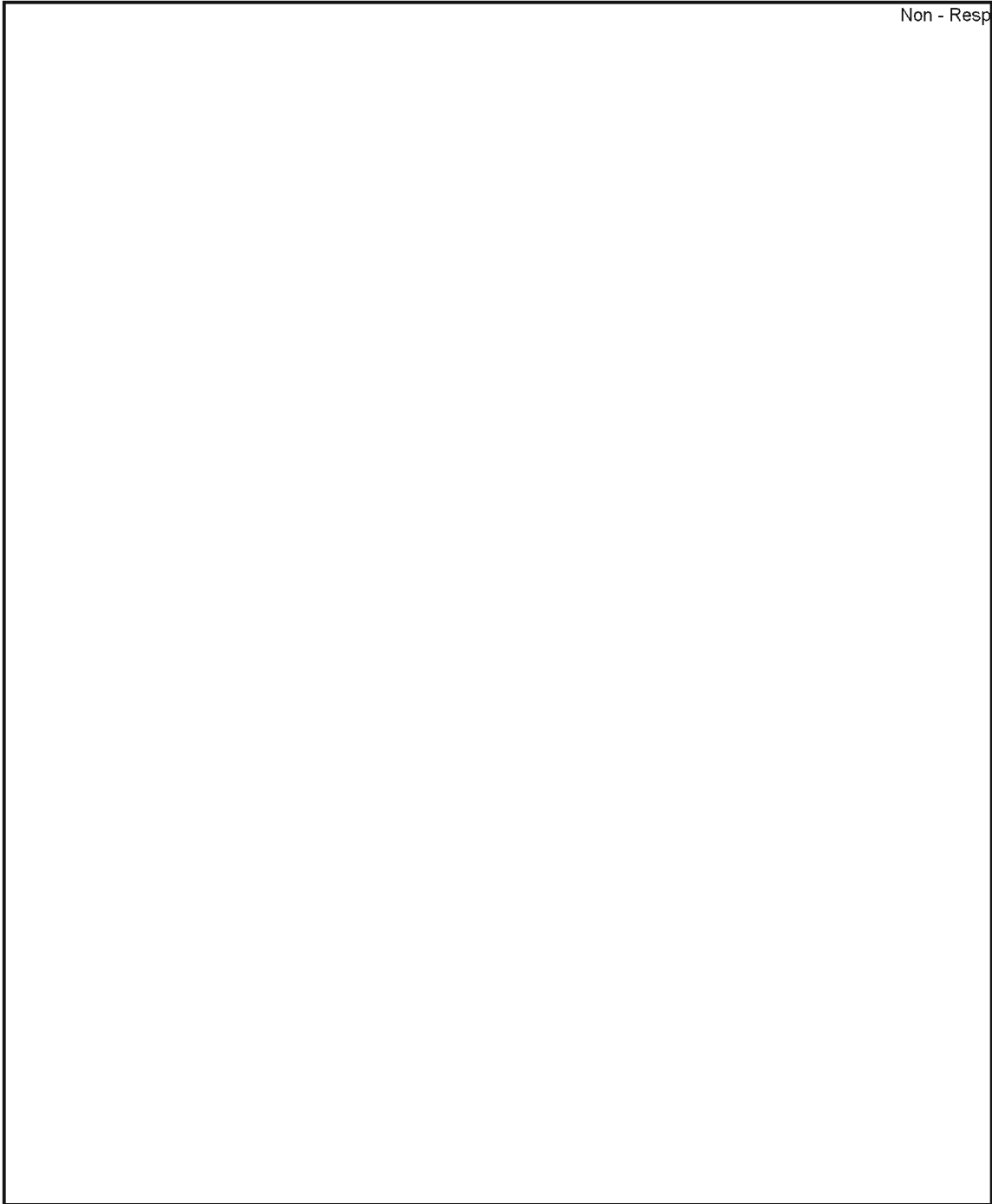


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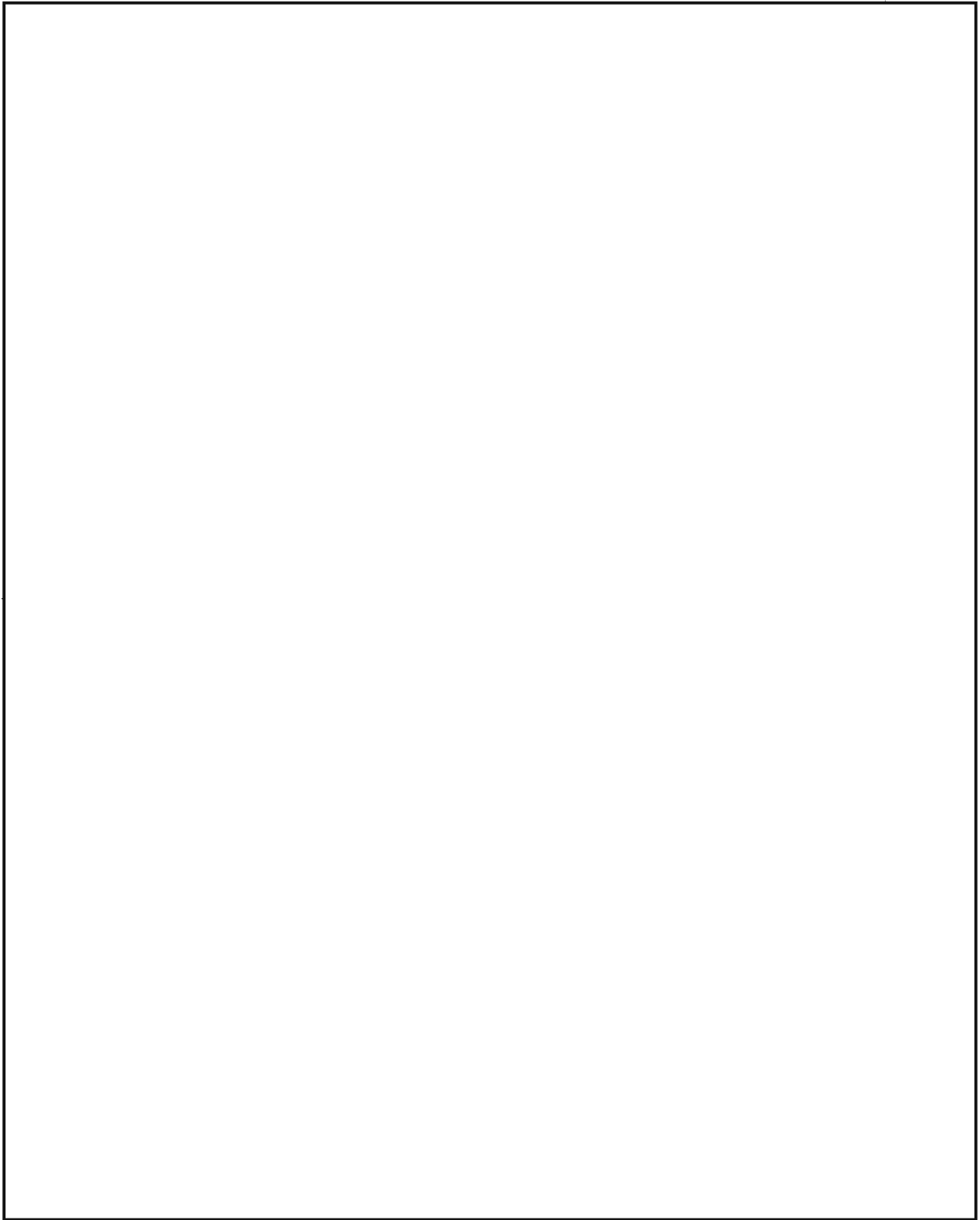
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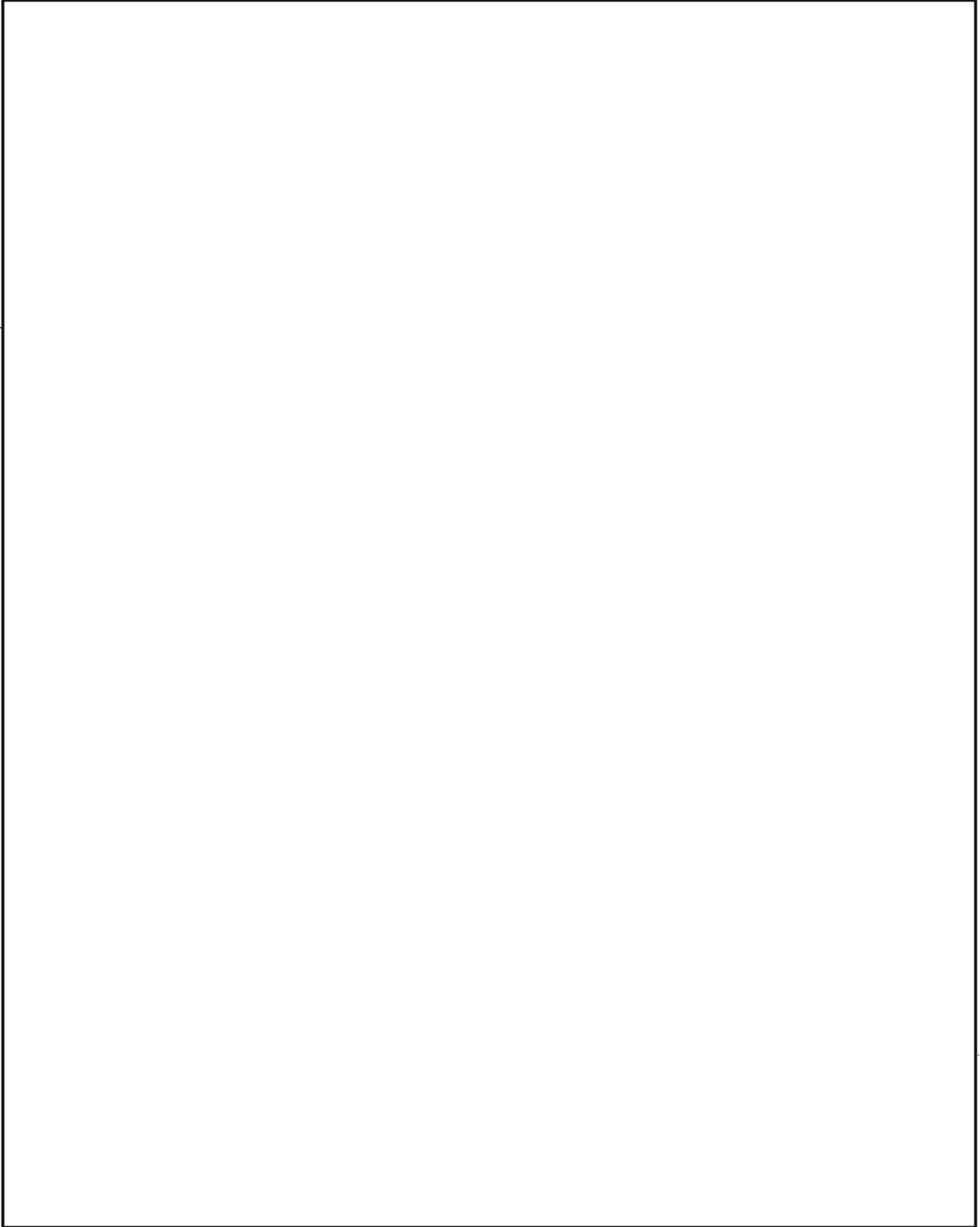
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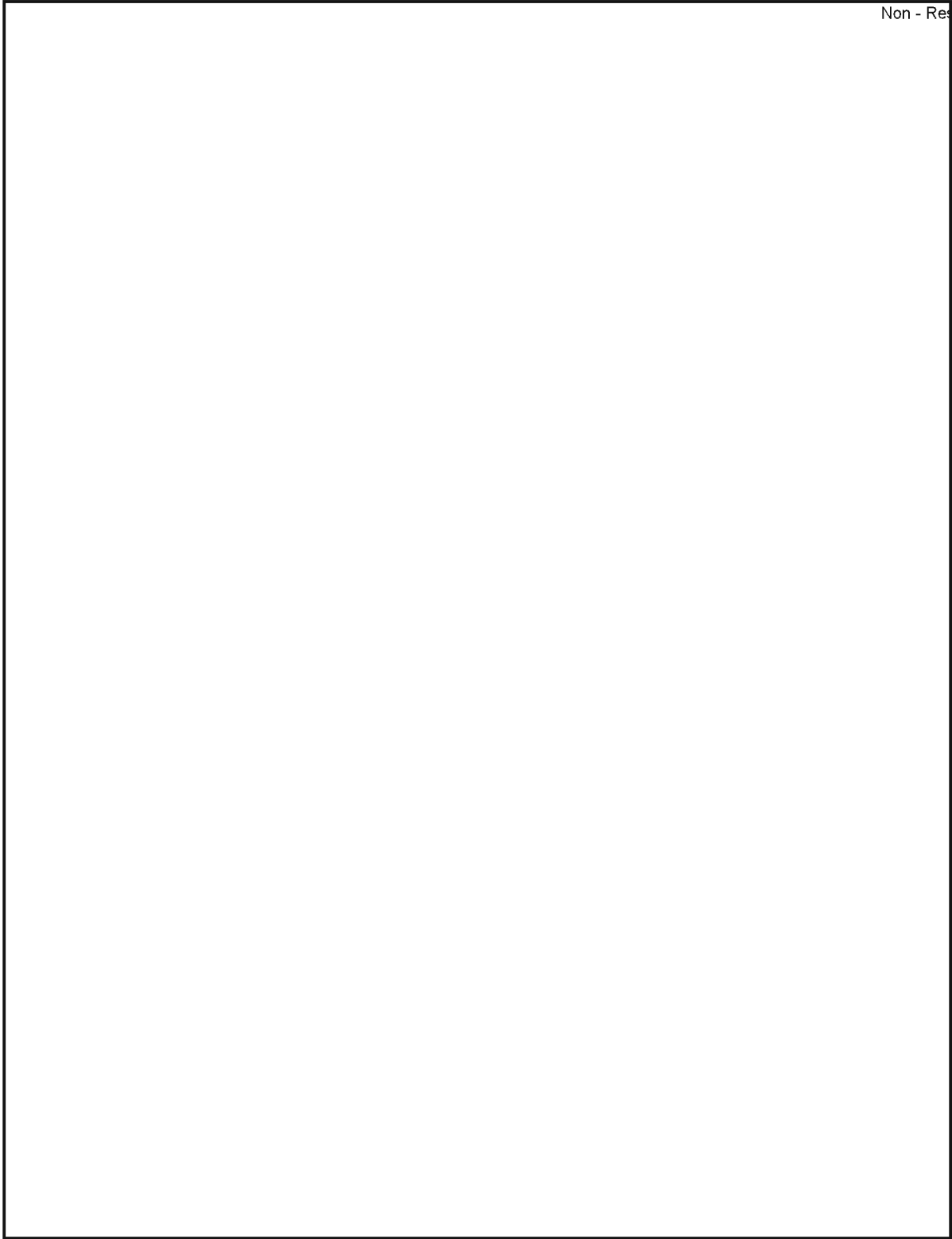
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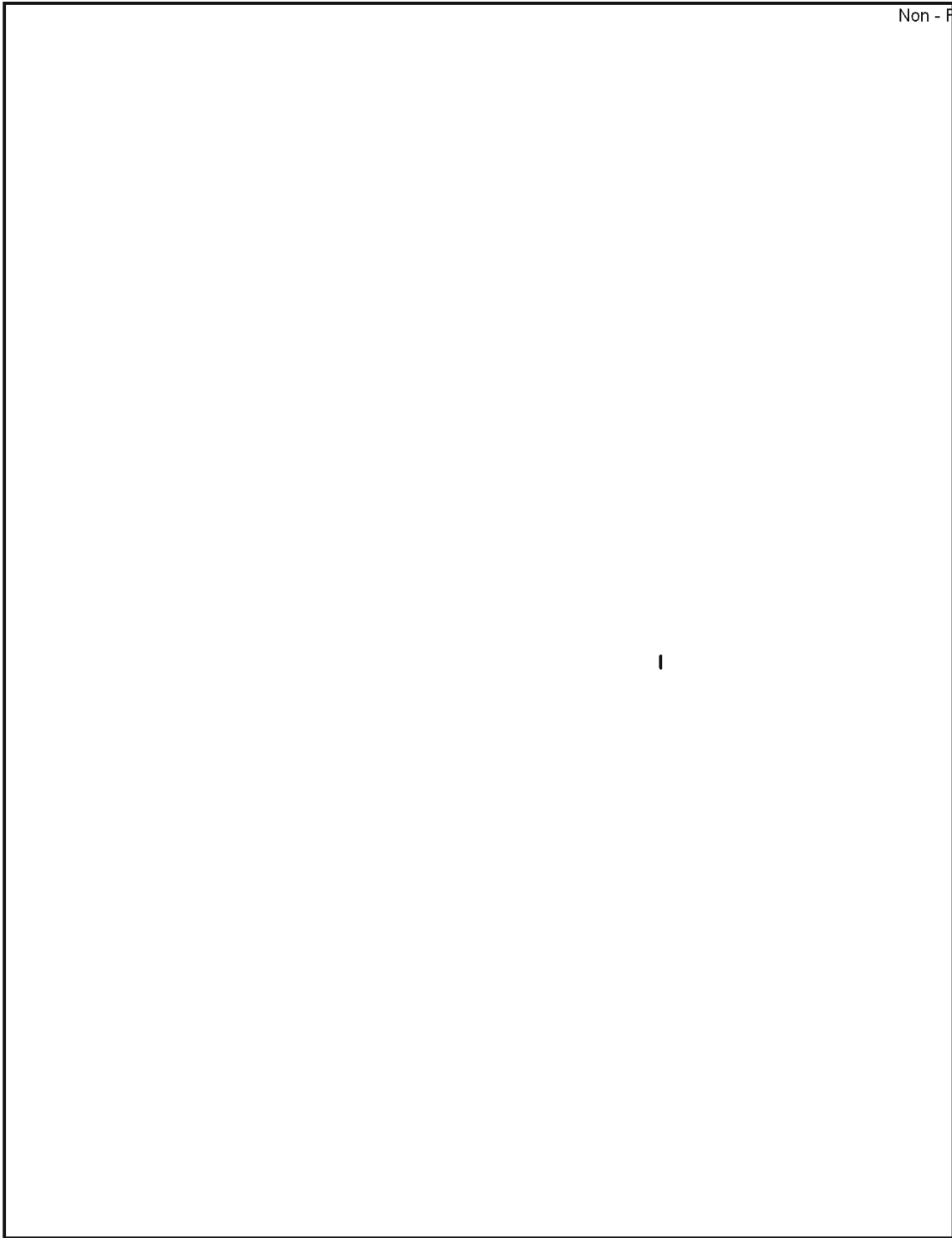


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Notes

(All materials are available at the Center for Cryptologic History (CCH)
or in the NSA Library, unless otherwise indicated.)

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[Redacted]

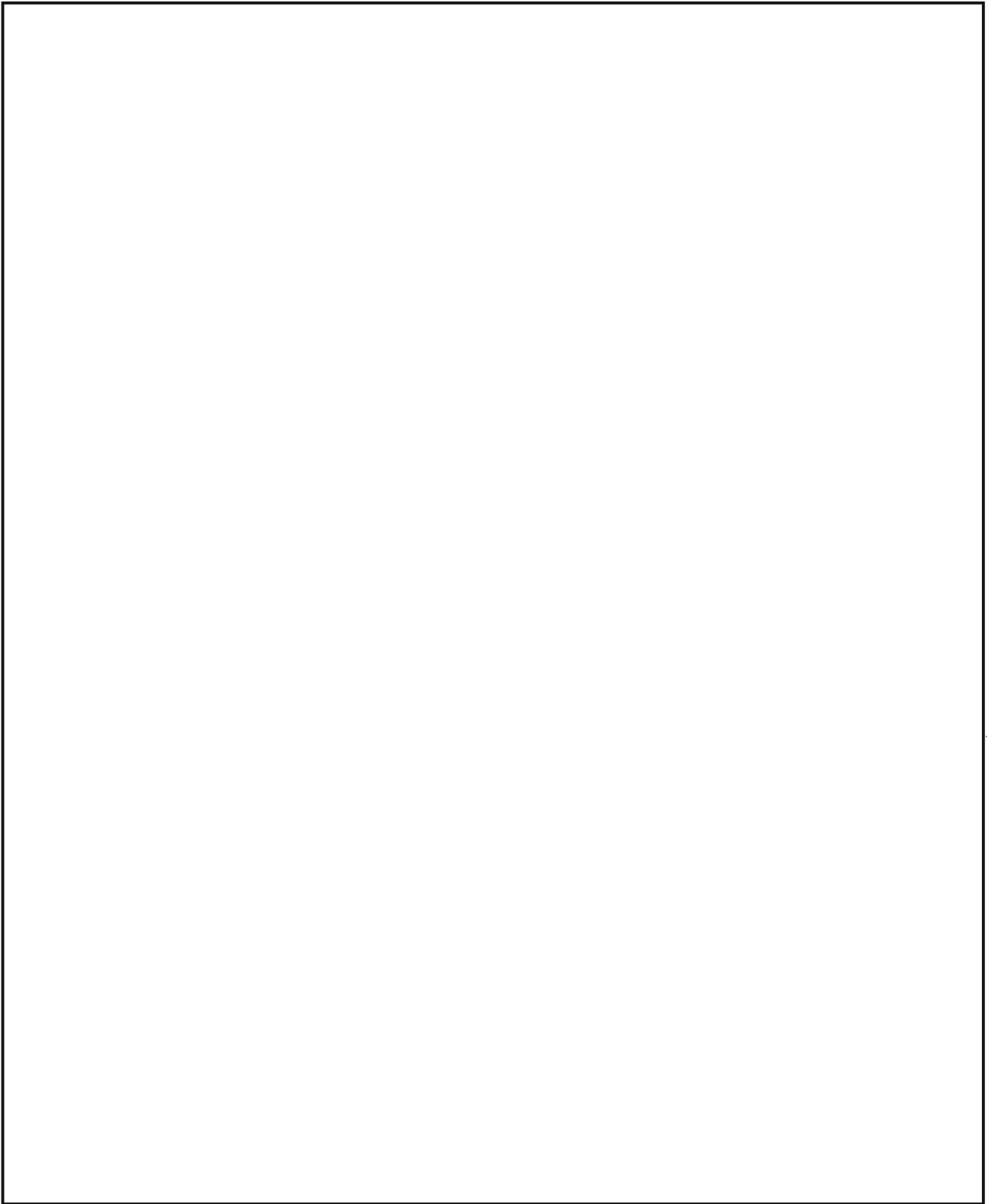
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(b)(3)-P.L. 86-36

5. Spencer Rich, "50 U.S. Airmen Downed by Soviets Never Were Traced," *The Washington Post*, June 14, 1992.

6. *U.S. News and World Report*, March 15, 1993, 30-56.

[Redacted]

Non - Responsive



Non - Responsive



65. (U) On 27 June 1958, a USAF C-118 transport was shot down by Soviet fighters, also in Soviet Armenia. The aircraft crash landed, the crew survived and were freed shortly thereafter. This incident was not included because it is the opinion of the writer that it was not a reconnaissance mission per se.

66. (U) Rush, *A History of the USAFSS Airborne SIGINT Reconnaissance Program (ASRP), 1950-1977*.

67. ~~(S)~~ Russian Language Translation into English, NSA serial 3/O [] T01-58 [] 3 October 1958 ~~(TSC)~~ And NSA report, titled: "Shoot-Down of a USAF C-130 by Soviet Aircraft on 2 September 1958," serial 3/O [] R182-58 [] 15 October 1958 ~~(TSC)~~; CCH Crisis Collection, Series VIII, box 8a. The B% symbol is technical jargon for the qualifier "probably," commonly used in SIGINT reporting during that period.

(b)(1)
(b)(3)-50 USC 403
(b)(3)-18 USC 798
(b)(3)-P.L. 86-36

68. (S) NSA, 3/O [] R182-58 []

69. ~~(S)~~ Several unsigned, undated working documents apparently prepared in support of Department of Defense and State Department follow-up actions; among which, one is titled: Historical Library Tape No. 1 C-130 Shootdown over Soviet Armenia ~~(S)~~; CCH Crisis Collection, Series VIII, box 8a.

70. Ibid.

71. Ibid.

72. English translation of articles in CCH Crisis Collection, Series VIII, box 8a.



(b) (1)

74. ~~(S)~~ Undated working paper, entitled: Chronology of NSA [redacted] State Department Actions on C-130 Incident
~~(TSC)~~; CCH Crisis Collection, Series VIII, box 8a.

75. ~~(S)~~ NSA, 3/O [redacted] T01-58 [redacted]

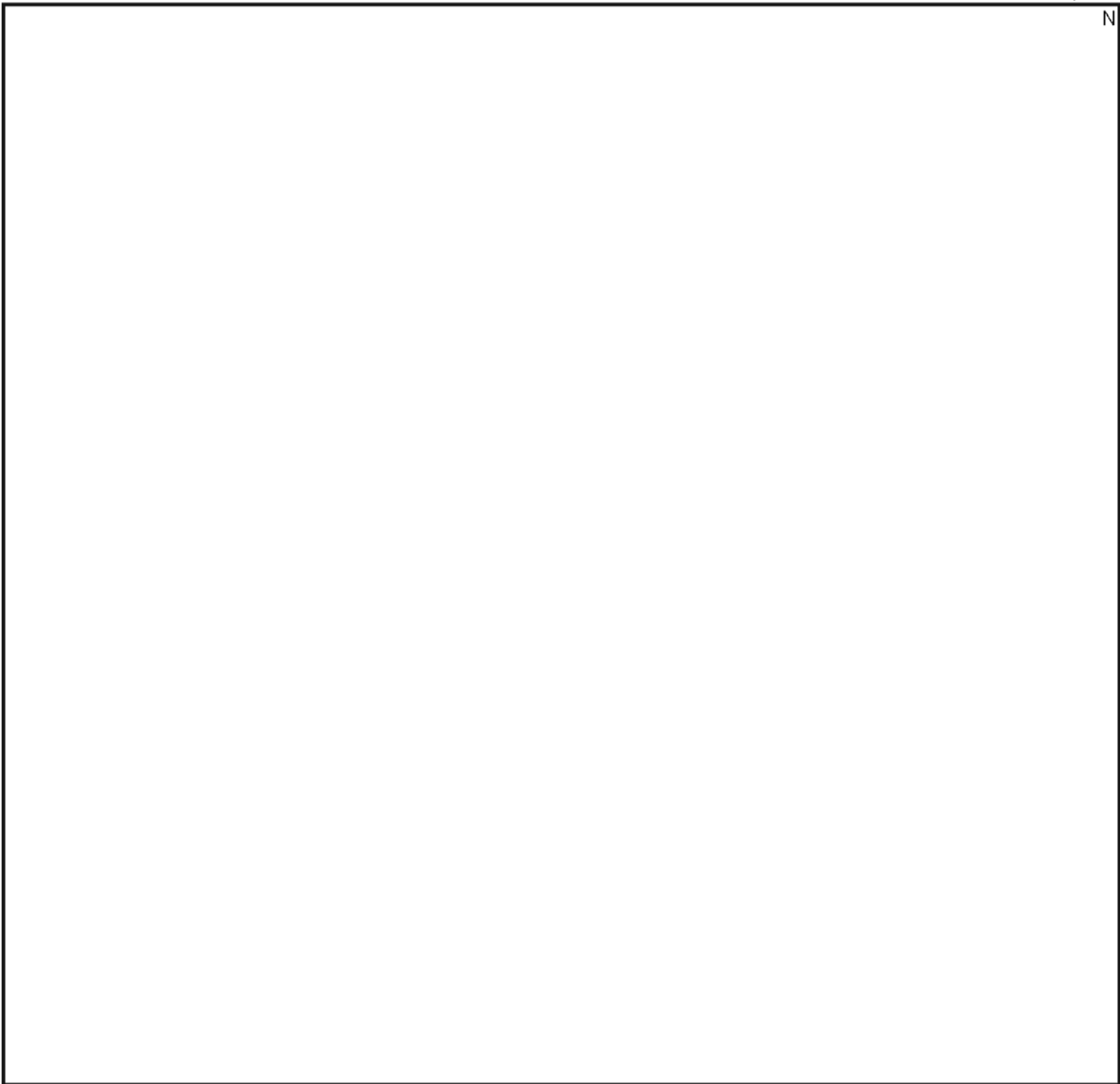
76. ~~(S)~~ NSA, 3/O [redacted] R182-58 [redacted]

(b)(1)
(b)(3)-50 USC 403
(b)(3)-18 USC 798
(b)(3)-P.L. 86-36



78. (U) State Department Press Release, 5 February 1959 (U); CCH Crisis Collection, Series VIII, box 8a.

79. Ibid.



Non - Responsive

Non - Responsive

