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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2022-0065; Notice 2]

Columbus Trading-Partners USA, Inc., Denial of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Denial of petition.

SUMMARY: Columbus Trading-Partners USA, Inc., (CTP), has determined that certain Cybex child restraint systems distributed by CTP do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 213, *Child Restraint Systems*. CTP filed an original noncompliance report dated June 30, 2022. CTP petitioned NHTSA on July 5, 2022, and amended the petition on August 4, 2022, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This document announces the denial of CTP's petition.

FOR FURTHER INFORMATION CONTACT: Kelley Adams-Campos, Safety Compliance Engineer, NHTSA, Office of Vehicle Safety Compliance, kelley.adamscampos@dot.gov, (202) 366-7479.

SUPPLEMENTARY INFORMATION:

I. Overview: CTP has determined that certain child restraint systems manufactured under the brand name CYBEX and distributed by CTP do not fully comply with paragraph S5.4.1.2(b)(1) of FMVSS No. 213, *Child Restraint Systems* (49 CFR 571.213). CTP filed an original noncompliance report dated June 30, 2022, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports*. CTP petitioned NHTSA on July 5, 2022, and amended the petition on August 4, 2022, for an exemption from the notification and remedy

requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance.*

Notice of receipt of CTP's petition was published with a 30-day public comment period, on August 26, 2022, in the **Federal Register** (87 FR 52674). No comments were received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) website at https://www.regulations.gov/. Then follow the online search instructions to locate docket number "NHTSA-2022-0065."

II. Child Restraint Systems Involved: Approximately 31,080 Aton M, Aton 2, Aton, Aton Q, and Cloud Q model child restraint systems manufactured by CYBEX approximately between June 6, 2017,[1] and November 1, 2020, are potentially involved.

III. Noncompliance: After being subjected to abrasion, the breaking strength of the harness central adjuster (adjuster) webbing on the subject child restraint systems was less than 75 percent of the new webbing strength as required by S5.4.1.2(b)(1) of FMVSS No. 213.

IV. Rule Requirements: Paragraphs S5.4.1.2(a) and S5.4.1.2(b)(1) of FMVSS No. 213 include the requirements relevant to this petition. The webbing of belts provided with a child restraint system which are used to restrain the child within the system shall, after being subjected to abrasion as specified in S5.1(d) or S5.3(c) of FMVSS No. 209 (§ 571.209), have a breaking strength of not less than 75 percent of the new webbing strength when tested in accordance with S5.1(b) of FMVSS No. 209. ''New webbing'' means webbing that has not been exposed to abrasion, light, or micro-organisms as specified elsewhere in FMVSS No. 213.

V. Background

In response to a July 2021 Information Request (IR) from NHTSA's Office of Vehicle Safety Compliance (OVSC) relating to this noncompliance, and after learning that CTP's

[1] In its June 30, 2022, Part 573 submission, CTP reported production dates between March 7, 2017, and November 1, 2020.

supplier, Holmbergs, did not have any historical test data for abrasion testing pursuant to FMVSS No. 213 S5.4.1.2(b)(1),[2] CTP claims it conducted abrasion testing on 2018 production adjuster webbing samples that would have been used on the (US) Aton M child restraint systems. As stated in CTP's petition, the results from this testing were that the webbing abraded using the hex bar test subceeded the required 75 percent of the new webbing breaking strength, averaging a median value of 64 percent, and the webbing abraded using CTP's "through-adjuster" test exceeded the required 75 percent of the new webbing breaking strength. CTP shared the results with NHTSA, submitting that FMVSS No. 213 S5.4.1.2(b)(1) provides two alternative abrasion test compliance options. The first, as provided in FMVSS No. 209 S5.1(d), (hex bar test) and the second, as provided in FMVSS No. 209 S5.3(c), referred to by CTP as "through-adjuster test." CTP filed a form 573 Noncompliance report acknowledging the noncompliance with the abrasion tests in FMVSS No. 209 and then filed a petition, as summarized below.

VI. Summary of CTP's Petition:

CTP explains that the adjuster webbing retained only 56.9 percent of the new webbing strength following the hex bar abrasion test[3] as specified in S5.1(d) of FMVSS No. 209.[4] CTP also acknowledges that, using an alternate "through-adjuster"[5] test methodology it developed, the adjuster webbing is noncompliant because CTP's test methods were "not an appropriate interpretation of FMVSS No. 209." The views and arguments provided by CTP are presented in this section, "VI. Summary of CTP's Petition." They do not reflect the views of the Agency. CTP describes the subject noncompliance and contends that the noncompliance is inconsequential as it relates to motor vehicle safety.

CTP believes that the subject noncompliance with the hex bar test is inconsequential to motor vehicle safety based on results from overload dynamic crash tests it conducted on Aton M

[2] In section 2 of its petition, CTP mistakenly referred to S5.4.1.2(b)(1) of FMVSS No. 213 as S5.4.2.1(b)(1).
[3] OVSC compliance test report available at https://static.nhtsa.gov/odi/ctr/9999/TRTR-647389-2020-001.pdf.
[4] In its petition, CTP mistakenly referred to FMVSS No. 209 as FMVSS No. 213.
[5] In its petition, CTP refers to S5.3(c) of FMVSS No. 209 *Resistance to buckle abrasion* as "through-adjuster" test.

child restraints assembled using abraded adjuster webbing. CTP states that this webbing was sourced from the same batch of webbing samples where some were tested for breaking strength after being abraded. Those tested for breaking strength averaged a median value of 64 percent retention of strength. CTP asserts that because the adjuster webbing loads (1,014 N maximum) measured in the dynamic tests were only a small fraction (11 percent) of the abraded webbing's retained strength, a significant safety margin is built into the adjuster webbing making it "sufficient for this application," i.e., Aton M and similar. This difference, CTP explains, shows that significantly more degradation (of webbing strength) could be tolerated. According to internal crash test data collected from tests varying in configuration, ATDs, attachment methods and crash severities, CTP states that the peak adjuster strap load recorded was 4,745 N. CTP also states that the dynamic crash tests of the child restraints with the hex bar abraded webbing showed that structural integrity of the child restraint was maintained and that the occupant was retained.

CTP notes that NHTSA's laboratory test procedure for FMVSS No. 209 Seat Belt Assemblies[6] "specifies that for webbing resistance to abrasion tests performed pursuant to FMVSS §4.2(d), 5.1(d), and 5.3(c) the assembly "***shall*** be subjected to the buckle abrasion test" if the "assembly contain [*sic*] a manual adjusting device" with the emphasis added. CTP then explains its methodology for the "through-adjuster" testing it employed. With respect to the requirements of FMVSS No. 209 S5.3(c) *Resistance to buckle abrasion*, CTP states, with the emphases added, that "[t]he webbing shall be pulled **back and forth** through the buckle or manual adjusting device as shown schematically in Figure 7…" and "[t]he webbing shall pass through the buckle…" CTP contends that the referenced schematic in Figure 7 of Standard No. 209 "should only be viewed as a general visual aid," and that the schematic "contradict[s] the plain language of the FMVSS." CTP states that although the schematic (in Figure 7 of Standard No. 209) does not appear to show the buckle or adjusting device opening and closing, "that

[6] Dated December 7, 2007.

action certainly must occur to meet the plain language and clear intent of the regulation." When CTP performed its "through-adjuster" testing on the 2018 production webbing samples, the webbing was cycled through the adjuster containing a cam lock. CTP states that the cam lock "must be opened during the lengthening stroke" otherwise the adjuster will "not allow webbing to move," i.e., pass through it. CTP investigated a variety of test conditions it claims are related to FMVSS No. 209 S5.3(c) "varying the amount and timing of the central adjuster cam opening" in each. CTP believes the "through-adjuster" abrasion test it used accurately exposes the webbing to the abrading environment that exists in the real-world application, and that "the language of the regulation, as well as the stated purpose of the regulation, should control the test methodology employed."

CTP explains it "relies on its suppliers to self-certify compliance to certain standards and requirements" and that Holmbergs "was following the Aton M US Control Plan" based on CTP's On-going Quality Control (OQC) reports. CTP provided the Control Plan, OQC and other documents in its April 14, 2022, supplemental response to NHTSA.

CTP states it has implemented replacement adjuster webbing on new child restraints manufactured beginning October 27, 2021, and that this webbing complies with all retained breaking[7] strength requirements after having been subject to both hex bar and "through-adjuster" testing. Additionally, CTP states it has clarified to its webbing supplier that the supplied webbing must comply with both available abrasion tests in its specifications. Finally, CTP states that since 2017 no adjuster webbing or adjuster assembly issues have been observed.

Details of CTP's investigation and testing can be found in its amended petition at https://www.regulations.gov/document/NHTSA-2022-0065-0001.

CTP concludes by stating its belief that the subject noncompliance is inconsequential as it relates to motor vehicle safety and its petition to be exempted from providing notification of the

[7] In its petition, CTP mistakenly refers to breaking as tensile.

noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

VII. NHTSA's Analysis:

The burden of establishing the inconsequentiality of a failure to comply with a *performance requirement* in an FMVSS is substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential.[8]

In determining inconsequentiality of a noncompliance, NHTSA focuses on the safety risk to individuals who experience the type of event against which a recall would otherwise protect.[9] In general, NHTSA does not consider the absence of complaints or injuries when determining if a noncompliance is inconsequential to safety. The absence of complaints does not mean vehicle occupants have not experienced a safety issue, nor does it mean that there will not be safety issues in the future.[10] Thus CTP's claim that, since 2017, no adjuster webbing or adjuster assembly issues have been observed is not persuasive in evaluating if this noncompliance is inconsequential to safety.

As CTP's petition explains, S5.4.1.2(b)(1) of FMVSS No. 213 provides two alternative abrasion test compliance options: the hex bar test (FMVSS No. 209 S5.1(d)) and the resistance to buckle abrasion test (FMVSS No. 209 S5.3(c)). Note that in its petition, CTP mischaracterizes the resistance to buckle abrasion test as a "through-adjuster" test; NHTSA takes this opportunity to correct this mischaracterization of Standard No. 209 S5.3(c) from hereon.

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[8] *Cf. Gen. Motors Corporation; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19899 (Apr. 14, 2004) (citing prior cases where noncompliance was expected to be imperceptible, or nearly so, to vehicle occupants or approaching drivers).

[9] *See Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); *Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 46000 (July 30, 2013) (finding occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

[10] *See Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21666 (Apr. 12, 2016); *see also United States v. Gen. Motors Corp.*, 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it "results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future").

With respect to CTP's argument that the webbing's maximum load, 1,014 N, measured during its overload dynamic crash testing using child restraint systems assembled with hex bar abraded adjuster webbing, or 4,745 N from its other internal crash test data, compared to the average median breaking strength, 9,506 N,[11] from its hex bar abraded webbing tests does not meet its burden of persuasion. The Agency does not find the argument that abraded webbing with a breaking strength less than the required minimum is offset, compliant or inconsequential to safety by exceeding webbing loads observed in dynamic crash tests. If we did, the minimum requirements would be written to accommodate it. Consistent with past Agency denials[12] for inconsequentiality petitions for noncompliant child restraint webbing that used dynamic crash test analyses in its basis, NHTSA is not compelled by CTP's arguments.

Furthermore, neither CTP's dynamic test analysis nor its claims based on other internal crash test data address the potential for safety issues resulting from possible further loss in webbing strength with continued long-term use. The webbing breaking strength test and child restraint system dynamic test do not test for the same conditions and serve distinct purposes. Requirements that apply to new child restraints only, such as the dynamic sled tests conducted on the child restraint as a system, do not provide comparable assurances for components, such as webbing, tested independently from the child restraint system.

Among our concerns is also that, according to its petition, CTP assembled the Aton M child restraints in the foregoing overload dynamic crash tests with adjuster webbing, after being abraded, sourced from the 2017-2018 production adjuster webbing batches "that would have been used on the (US) Aton M" subject to its petition. Adjuster webbing from these batches were also used in CTP's hex bar abrasion and breaking strength tests, where the webbing's median breaking strength retention ranged from 61 percent to 66.2 percent.[13] CTP relies on the

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[11] CTP determined the median value in each of four tests (each test contained 3 samples) and then averaged the four median values to come up with an "average median breaking strength" of 9,506 N.
[12] Combi USA, Inc., Denial of Petition for Decision of Inconsequential Noncompliance, 86 FR 47723 (and decisions cited therein) (August 26, 2021).
[13] Section 8, Table "HEX-BAR ABRASION TEST RESULTS (performed Sept 2021), FMVSS213. S5.4.1.2(b)" in CTP's petition.

average of these degradation rates as being representative of all adjuster webbing coming from these 2017-2018 batches. However, in the Aton M models tested in the OVSC's compliance testing, assembled with adjuster webbing that CTP asserts would have come from these same 2017-2018 production batches, the breaking strength retention after abrasion was 56.9 percent, a significantly lower degradation rate. Even if CTP's test results were relevant, NHTSA does not find them persuasive. Notwithstanding that other webbing samples from the same batches could have even greater degradation rates, i.e., lower breaking strength retention percentages, the webbing strength could degrade to levels even lower than in these foregoing instances over an entire lifetime of actual use.

CTP uses its dynamic testing to argue that the adjuster webbing's absolute strength, versus the required 75 percent retention strength, after abrasion is sufficient for its application in an infant child restraint. According to CTP, all that matters is whether webbing that has been subjected to the abrasion test is stronger than certain loads it claims to have measured on the webbing in limited dynamic testing, tantamount to establishing an "effective minimum." This argument challenges the stringency of the requirement in the standard, to which a petition for rulemaking, not an inconsequentiality petition, is the appropriate means.[14] CTP's approach is additionally inconsistent with the two-faceted regulatory structure that NHTSA adopted in the 2005-2006 rulemaking,[15] establishing a minimum breaking strength requirement for new webbing. In that rulemaking, the Agency explained that the fact that webbing has a particular strength after being subjected to the abrasion test does not mean further degradation is not possible.[16] Both the new webbing strength and degradation rate requirements after abrasion are important from a safety perspective[17] and do not vary based on probable use patterns, e.g., infant child restraints or otherwise.

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[14] *See Dorel Juvenile Group; Denial of Appeal of Decision on Inconsequential Noncompliance*, 75 FR 510, January 5, 2010.
[15] *See Federal Motor Vehicle Safety Standards; Child Restraint Systems,* 70 FR 37731 and 71 FR 32855.
[16] *See Federal Motor Vehicle Safety Standards; Child Restraint Systems*, 71 FR 32858-859, June 7, 2006.
[17] *See Dorel Juvenile Group; Denial of Appeal of Decision on Inconsequential Noncompliance*, 75 FR 510, January 5, 2010.

The abrasion test is an accelerated aging test that provides a snapshot of the webbing over prolonged exposure to environmental conditions. The tests do not, and are not intended to, assess how strong a particular tested specimen will be at the end of its life.[18] The tests do not replicate the lifetime use of the webbing.[19] In the 2006 Final Rule, the Agency affirmed that retaining control over webbing material degradation rates is critical to ensure sufficient webbing strength over time. NHTSA believes that when a required webbing degradation rate is not met, as in the case of CTP's Aton M adjuster webbing, its performance as it ages will expose child occupants to a risk that increases with long-term use, thus we are not persuaded with this argument made by CTP that the noncompliance is inconsequential to safety.

Figure 7 of Standard No. 209 illustrates the required setup for the resistance to buckle abrasion testing specified in S5.3(c). NHTSA does not agree with CTP's argument that the schematic in Figure 7 "should only be used as a general visual aid." In fact, the regulatory text specifically states, "[t]he webbing shall be pulled back and forth through the buckle or manual adjusting device as shown schematically in Figure 7." The design of the manual adjusting device for the adjuster on the subject child restraint systems does not facilitate performing the test in the manner specified in S5.3(c) or as shown in Figure 7. This is illustrated by CTP's alternate test methodology it performed, explaining that in order for the webbing to be pulled back and forth through the manual adjusting device as shown in Figure 7 its cam lock "must be opened during the lengthening stroke" otherwise the manual adjusting device will "not allow webbing to move," i.e., pass through it. In its petition, CTP states that it investigated a variety of test conditions related to FMVSS No. 209 S5.3(c) that included "varying the amount and timing of the central adjuster cam opening" and that the results exceeded the retained breaking strength requirement of 75 percent.

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[18] *Id.*

[19] ''The primary purposes of laboratory tests are merely to save valuable time and to serve as controls in the manufacture of basic materials.'' Plastics Engineering Handbook of the Society of the Plastics Industry, Inc., Third Ed., Van Nostrand Reinhold Company, 1960.

The Agency does not find these results to be impactful because the way in which they were obtained is not consistent with any procedure established in the standard and therefore does not demonstrate compliance. Intentionally and actively, i.e., manually, opening the cam lock, as CTP did, in any amount, regardless of the timing cadence, is in direct conflict with S5.3(c) and Figure 7 of FMVSS No. 209. Such manipulation, or any other purposeful means of releasing the buckle or manual adjusting device, is not specified in S5.3(c) or elsewhere in Standard No. 209. Moreover, such manipulation directly reduces the amount of contact between the adjusting device and the adjuster webbing, making the test less severe.

The Agency reiterates its long-standing position that a manufacturer may choose any means of evaluating its products to determine whether the vehicle or item of equipment complies with the requirements of that standard, provided the manufacturer exercises due care in ensuring that the vehicle or equipment will comply with Federal requirements when tested by the Agency according to the procedures specified in the standard. In other words, the manufacturer must show that its chosen means is a reasonable surrogate for the test procedure specified by the standard[20] and should be sufficient to support the conclusion that, if tested under the specified conditions, the product would perform as required.[21] CTP's procedure was not sufficient as a surrogate or otherwise in demonstrating compliance with FMVSS No. 213 because its procedure did not replicate the abrading produced by following S5.3(c) of FMVSS No. 209. CTP appears to suggest that the schematic in Figure 7 of Standard No. 209 has little value in defining the required test methodology, through its belief that "the language of the regulation, as well as the stated purpose of the regulation, should control the test methodology employed." CTP's assertion is incorrect. FMVSS No. 209 S5.3(c) states that "[t]he webbing shall be pulled back and forth through the buckle or manual adjusting device as shown schematically in Figure 7." Thus, Figure 7 is directly incorporated into the standard.

[20] https://www.nhtsa.gov/interpretations/aiam4760
[21] https://www.nhtsa.gov/interpretations/aiam0434

CTP asserts in its petition that the Agency's laboratory test procedure (TP) for enforcement of FMVSS No. 209 Seat Belt Assemblies,[22] specifies that if the "assembly contain [*sic*] a manual adjusting device" the assembly shall be subjected to the buckle abrasion test. As explained in a legal note set forth at its beginning, "[t]he OVSC Test Procedures are prepared for the limited purpose of use by independent laboratories under contract to conduct compliance tests for the OVSC. The TPs are not rules, regulations or NHTSA interpretations regarding the FMVSS." The note continues to explain that as long as the tests are performed in a manner consistent with the FMVSS itself, NHTSA may authorize contractors to deviate from the procedures. In order to be consistent with the requirement options provided in FMVSS No. 213 S5.4.1.2(b)(1) for the abrasion testing of the adjuster webbing, and to conduct the tests as specified with respect to the design of the subject child restraint system, the hex bar test of S5.1(d) of FMVSS No. 209 was the correct procedure in this case. Despite CTP's contention that its test methodology "accurately exposes the central adjuster webbing to the abrading environment that exists in the [child restraint] application" NHTSA concludes that because of CTP's deviations from the protocol established in the FMVSS, the protocol fabricated by CTP with its "through-adjuster" test was less stringent than required by the standard and does not establish compliance with it.

In regard to CTP's description that what caused the noncompliance of the subject child restraint systems was its reliance on its suppliers to self-certify to the FMVSSs, NHTSA takes this opportunity to remind the reader of the following. First, the National Traffic and Motor Vehicle Safety Act[23] (the Safety Act) requires that motor vehicles or motor vehicle equipment meet two separate requirements before they may be sold or otherwise introduced into interstate commerce in the United States: (1) they must be compliant with the FMVSS, and (2) they must be certified as compliant by a manufacturer exercising reasonable care.[24] "Manufacturer" means

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[22] Dated December 7, 2007.
[23] 49 U.S.C. 30101.
[24] 49 U.S.C. 30112, 30115.

a person manufacturing or assembling motor vehicles or motor vehicle equipment, or importing motor vehicles or motor vehicle equipment for resale.[25] Second, as previously stated, a manufacturer may choose any means of evaluating its products to determine whether the vehicle or equipment will comply with the safety standards when tested by the agency according to the procedures specified in the standard. In this case, it appears that CTP fully and solely relied on its supplier to produce webbing compliant with S5.4.1.2(b)(1) of FMVSS No. 213. While this may be legally permitted, as the distributor whose name appears on the child restraint system, CTP accepted certification responsibility of the subject child restraint systems, and ultimately is accountable for it.

CTP claims it has implemented replacement adjuster webbing on newly manufactured child restraints beginning October 27, 2021, and that this webbing complies with all retained breaking strength requirements after having been subjected to both hex bar and resistance to buckle abrasion testing. In its petition, CTP attached Exhibit A[26] in support of its claim that child restraints with webbing manufactured in 2021 were verified to be compliant with FMVSS No. 213 S5.4.1.2(b)(1). Exhibit A contained portions of the January 14, 2022, OVSC test report[27] for FMVSS No. 213 Component Tests for Aton M models tested as part of its FY2021 compliance program. The date of manufacture of the Aton M models tested in that report was 11/26/2020. NHTSA does not consider CTP's Exhibit A to be relevant to its petition because it did not apply to the child restraint systems that were the subject of its petition.

VIII. NHTSA's Decision:

In consideration of the foregoing, NHTSA has decided that CTP has not met its burden of persuasion that the subject FMVSS No. 213 noncompliance is inconsequential to motor vehicle safety. Accordingly, CTP's petition is hereby denied, and CTP is consequently obligated to

[25] 49 U.S.C 30102.
[26] In its petition, CTP mistakenly referred to Exhibit A as Exhibit 1.
[27] https://static.nhtsa.gov/odi/ctr/9999/TRTR-647554-2021-001.pdf.

provide notification of and free remedy for that noncompliance under 49 U.S.C. 30118 and 30120.

(**Authority:** 49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8.)

Anne L. Collins,

Associate Administrator for Enforcement.

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