Alisa Baer
25 Minetta Ln #2A
NY NY 10012
alisa@thecarseatlady.com

March 25, 2020

James Owens, Acting Administrator
US Department of Transportation
National Highway Traffic Safety Administration
Office of Defects Investigation (NVS-210)
1200 New Jersey Ave, SE
Washington, DC 20590

Re: Defect Petition - Britax Frontier Click Tight structural failure
NHTSA Complaint #11317879

Mr. Owens,

I am submitting a defect petition request for NHTSA to further investigate the Britax Frontier ClickTight car seat for catastrophic structural failure that allows the harness to completely pull through the seat - which resulted in the death of a 4 year old child in November 2019.

On October 16, 2018 Consumer Reports first raised concerns about the structural integrity of several Britax Harness-to-Booster seats that all share a similar structural shell - the Pioneer, Frontier, and Pinnacle.[1] In their testing, Consumer Reports found:

- "The harness support hardware at the rear of the seat's shell in the child's shoulder area broke in our tests.
- For the Britax Frontier ClickTight, the structural damage was severe enough that the harness "pulled through" the seat completely, allowing the harness to loosen in one test conducted with a 78-pound dummy, which simulates an average 10-year-old child.
- In two tests for the Britax Pioneer with a 62-pound dummy that simulates a heavy 6-year-old and in two tests (one with each model) with a 52-pound dummy that simulates an average 6-year-old, the structure that supports the headrest and harness broke, but the harness did not pull through.
- The seats did not exhibit any structural issues in tests with a 35-pound dummy that simulates an average 3-year-old.

[1] https://www.consumerreports.org/toddler-booster-seats/child-car-seats-from-britax-cosco-graco-harmony-break-in-consumer-reports-tests/

- The maximum weight limit for using the harness with the Britax Frontier ClickTight is 90 pounds; it is 70 pounds for the Pioneer."

Of note, since CR released this testing, Britax has rebranded the Pioneer, Frontier, and Pinnacle as the Grow With You, Grow With You ClickTight, and Grow With You ClickTight Plus which only differ from their predecessors in that the max harness weight is now 65 pounds for all.

The failures detailed by Consumer Reports sound strikingly similar to what happened in the crash detailed below. On 11/13/2019 at 06:18 a 2016 Nissan Rogue swerved to the left, then to the right, and struck a utility pole head on at 30mph. The driver had minor abrasions. There were two children in the back seat - both in forward facing car seats installed with the lower anchors and tether strap.

On the rear passenger side was a 2y2M male child in a Cosco Alpha Omega Elite (DOM 5/17/2011) who sustained minor injuries - a few abrasions, bruises on his head, and bit his tongue.

On the rear driver's side was a 4y0m male child 42 inches (38.5lbs during last physical exam, approx 2 months prior) in a Britax Frontier ClickTight XE (Model: E1A076L, Batch: Job0012260, Serial: E1A076L003725, Date of Manufacture: 3/4/2015). The Frontier ClickTight XE's "5 point harness pulled and broke through the plastic framing of the shell". The 4 year old was initially crying and whimpering but quickly became unresponsive and went into cardiac arrest on the scene. He was eventually revived, but was declared brain dead and removed from life support on 11/15/2019.

Autopsy concluded that the child died of multiple blunt force injuries:

- Acute subdural and subarachnoid hemorrhage
- Cerebral swelling with herniation
- Hypoxic-ischemic encephalopathy
- Diastatic fractures of the coronal and sagittal sutures
- Contusion and abrasions of the chest and extremities
- Pulmonary contusions
- Pulmonary congestion and edema
- Ascites

The car seats remained installed post-crash and were evaluated in the vehicle on 11/14/19 by a State Police officer who is a CPST. He noted the Frontier was installed using the lower anchor strap and that it was properly attached, routed, and locked to the vehicle's lower anchors and the tether strap was properly routed underneath the head restraint and attached to the tether anchor on the rear of the seat. He noted approx. 4 in. of side to side and forward movement of the Frontier. The following is from the officer's report: "Upon further inspection, it was found that

the shell portion of the seat was severely damaged. The 5 point harness pulled and broke through the plastic framing of the shell, causing the harness and adjustable portion of the seat to come forward, with the frame still being attached to the vehicle. This would explain that when the child was first contacted after the crash, it was described to officers that he was "hunched over". I removed the Britax Child Safety seat from the vehicle and made further observations. I observed broken pieces to include a metal spring and plastic parts on the vehicle seat, underneath the child safety seat. These parts were broken from the Britax safety seat. Further damage was found to the shell of the seat, to include the harness routing path and multiple locations to the rear of the seat. The adjustable portion for the head protective portion was completely dislodged from the shell."

This Britax Frontier ClickTight features a unique tether, which Britax describes as follows:

> **V-Shaped Tether** has a unique two-strap design that slows forward movement, and rows of stitching that "give-way" one at a time in the event of a crash.[2]

The rows of stitching on the Frontier ClickTight in the Nov. 2019 crash did not give-way at all.



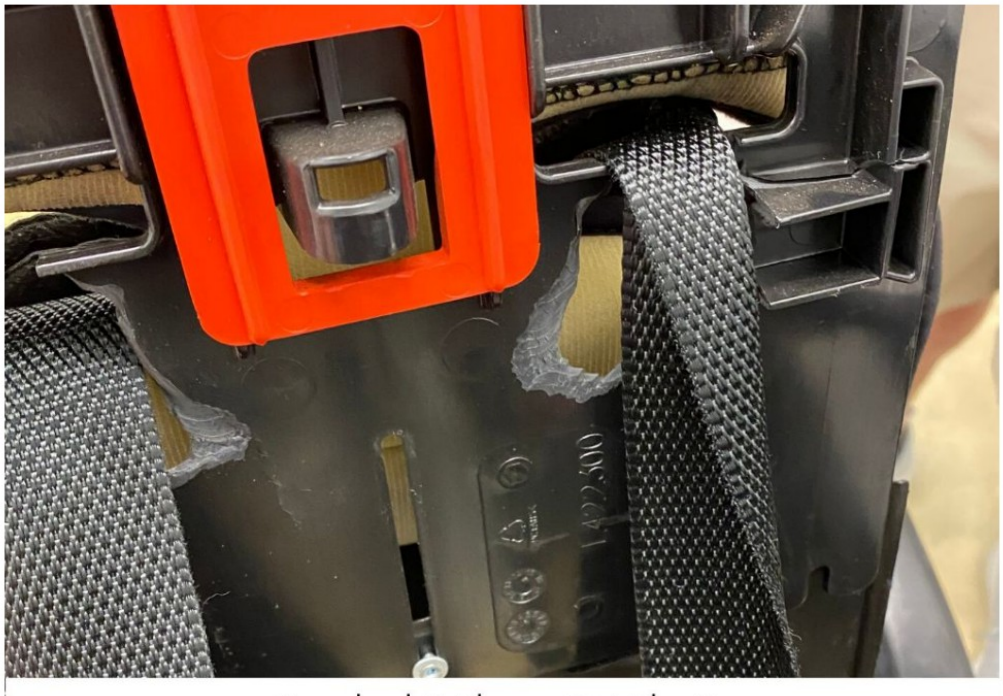
Britax Versa-Tether
Red stitching that is supposed to give-way in a crash is completely intact on both sides

Thank you,

Alisa Baer, MD
Pediatrician & CPST-I

[2] https://us.britax.com/product-knowledge/articles/britax-safety-harness-2-booster/

Pictures of the Frontier ClickTight XE in the Nov 2019 Crash



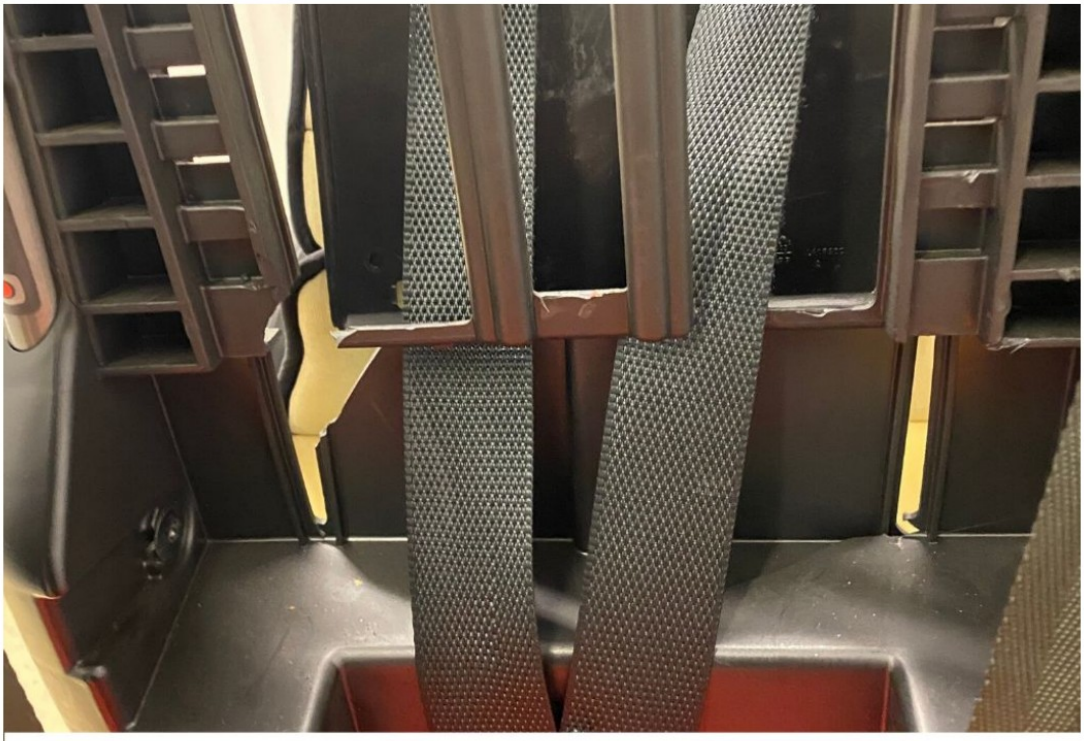
Cracked & Blown-Out Plastic

Head rest pulled forward (due to breakage the head rest can be pulled this way)



Cracked & Blown-Out Plastic

Head rest pulled forward (due to breakage the head rest can be pulled this way)



Cracked & Blown-Out Plastic

Head rest pulled forward (due to breakage the head rest can be pulled this way)



Cracked Plastic



Cracked & Blown-Out Plastic

Fabric behind child's back was lifted to reveal this area



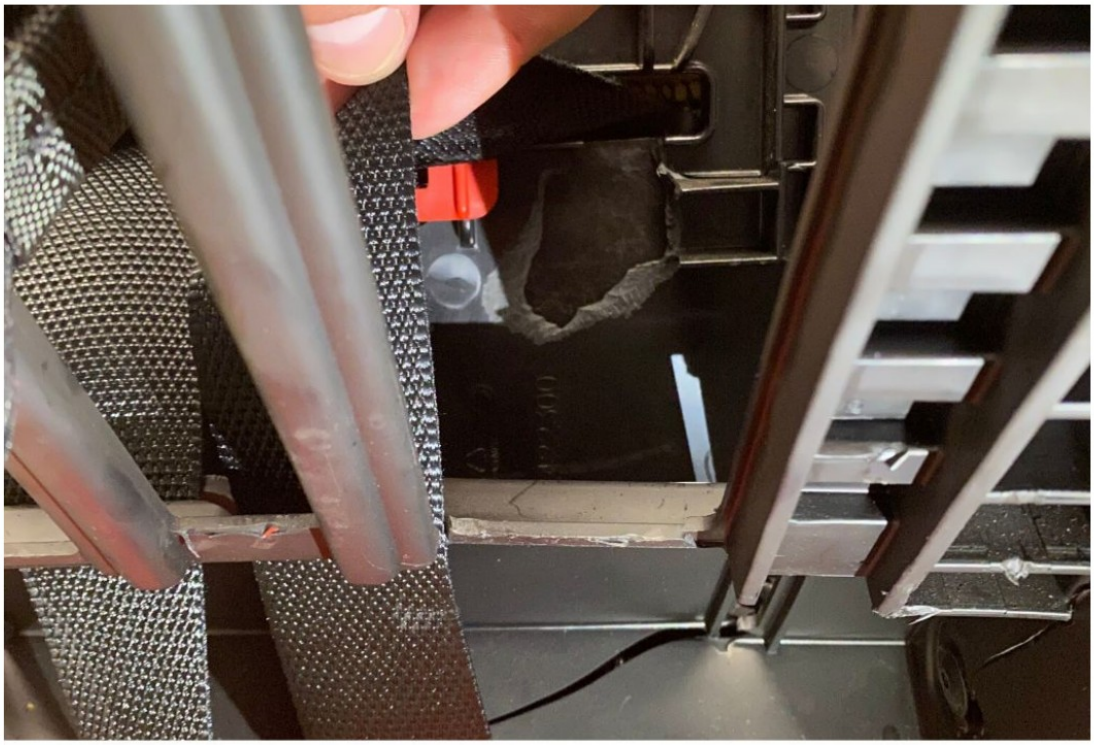
Cracked Plastic

Hand is holding in place the "triangular" shard of plastic from where it broke off from



Cracked Plastic

At lower rear of the child restraint



Cracked Plastic

At lower rear of the child restraint



Broken Parts from Britax Car Seat

These were found in the vehicle