

From: [Garner, Kyle](#)
To: [Malinowski, Edward](#)
Cc: [Smith, Greg](#)
Subject: CEN20LA379 - email report for review
Date: Monday, November 16, 2020 14:58:05
Attachments: [CEN20LA379_recorders_1.jpg](#)
[CEN20LA379_recorders_2.jpg](#)
[CEN20LA379_recorders_3.jpg](#)

Hi Ed,

Please see email report for CEN20LA379 below.

Email Report Instructions:

The narrative and attachments from this email report may be used in other reports at the discretion of the IIC. This email, including all attachments, should also be placed in the public docket by the IIC.

Email Report:

The Vehicle Recorder Division received two compact flash (CF) cards recovered from an ARNAV ICDS 2000 multi-function display, however, it was determined that only one of the CF cards could record flight data. The CF card arrived exhibiting signs of impact damage (CEN20LA379_recorders_1.jpg). The non-volatile memory (NVM) chips were located, however, they also exhibited signs of impact damage (CEN20LA379_recorders_2.jpg, NVM chips outlined in red). The non-volatile memory chips were x-rayed to determine if the damage extended under the outer casing. The x-ray determined that the underlying NVM chips were cracked (CEN20LA379_recorders_3.jpg) and due to the damage, no data could be recovered from the device.

Prepared by: Kyle Garner, Recorder Specialist, NTSB RE-40

Thanks,

Kyle Garner
Recorder Specialist
National Transportation Safety Board




Photo 1 – The CF card arrived exhibiting signs of impact damage.

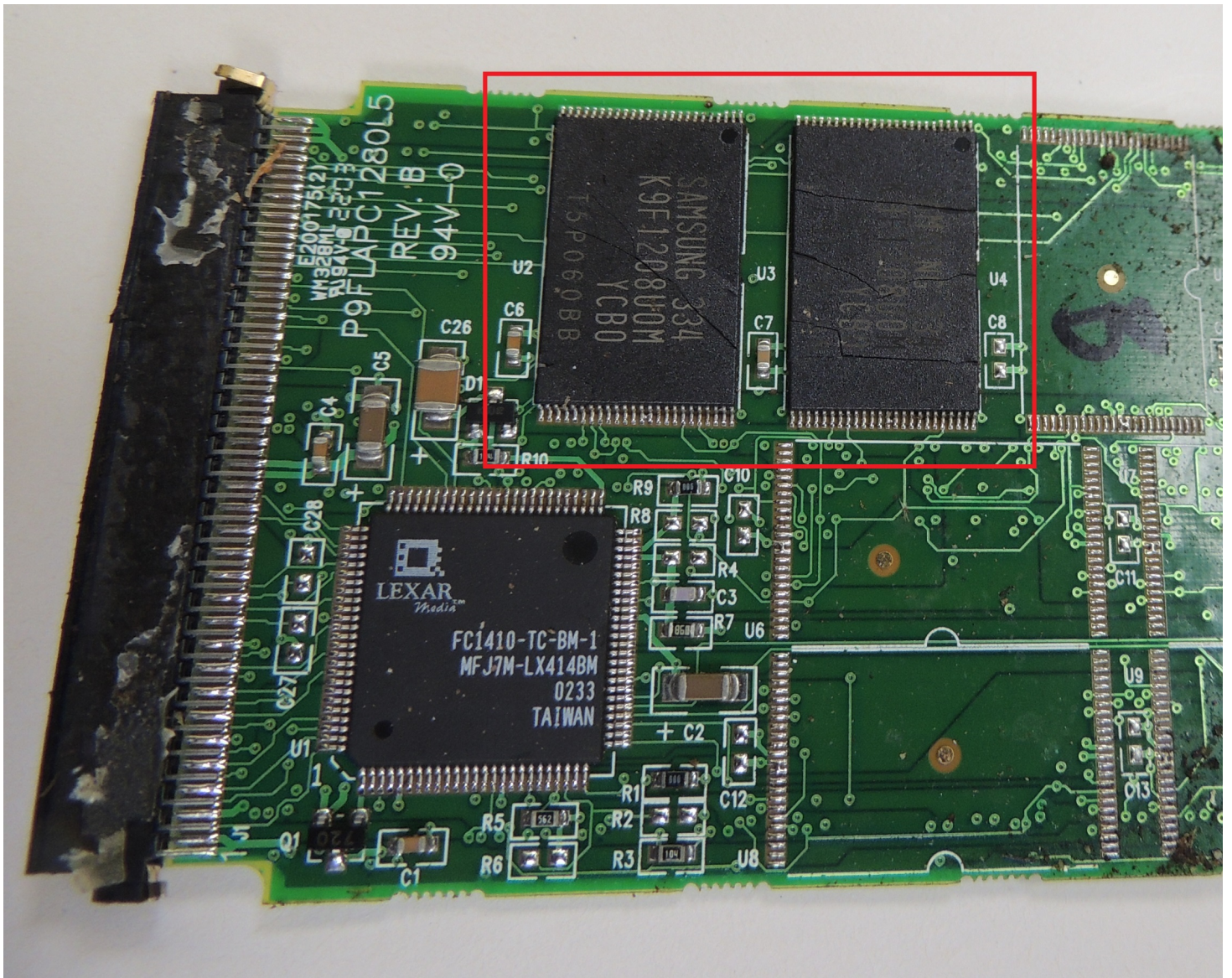


Photo 2 - The non-volatile memory (NVM) chips exhibited signs of impact damage.

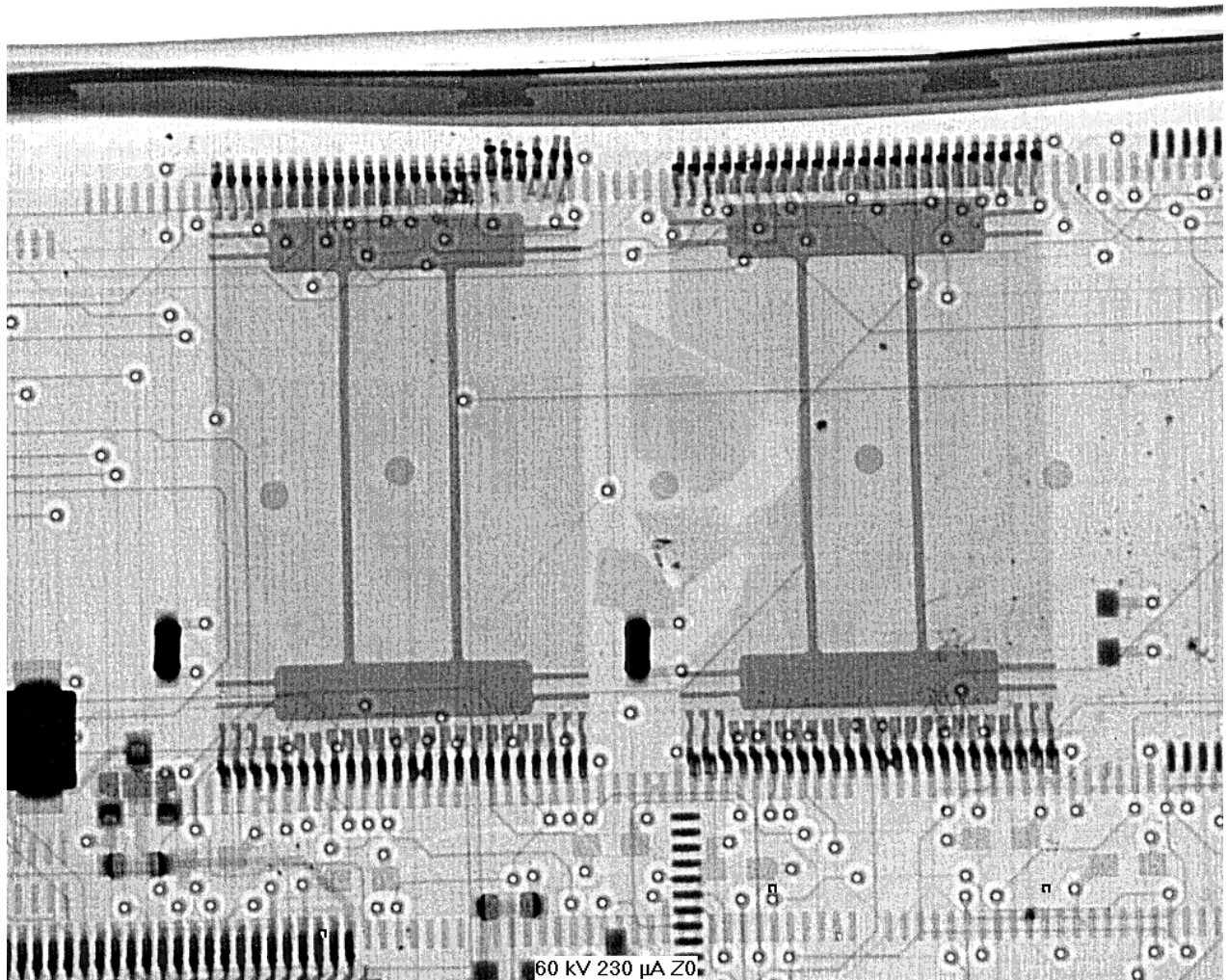


Photo 3 - The x-ray exhibited that the underlying NVM chips were cracked.