

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division
Washington, D.C. 20594

June 14, 2021

Electronic Device

Specialist's Factual Report By Gerald Kawamoto

1. EVENT SUMMARY

Location: Old Bethpage, New York
Date: January 10, 2021
Aircraft: Cessna 421B
Registration: N421DP
Operator: Private
NTSB Number: ERA21LA098

2. GROUP

A group was not convened.

3. DETAILS OF INVESTIGATION

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received the following device:

Device Manufacturer/Model:	Shadin DigiData
Serial Number:	538

3.1. Device Description

The Shadin DigiData is a digital fuel management system designed to provide fuel management information under real flight conditions without manual entry of data (after entry of the initial fuel on board). It connects to the engine's fuel flow transducers for fuel flow information and to a Loran-C or GPS receiver serial port for navigation data.

The system includes non-volatile memory that retains fuel remaining information, display brightness settings, the currently selected Airdata page, and the latest barometric pressure setting.

3.2. Data Recovery

Upon arrival at the Vehicle Recorder Laboratory, an external examination revealed the device had sustained minor impact damage resulting in deformity to the housing, as shown in Figure 1. An internal examination showed the electronic components were in good condition and the device powered on normally.



Figure 1. Shadin DigiData as received.

3.3. Data Description

Figure 2 show screens for Fuel Remaining and Fuel Used.

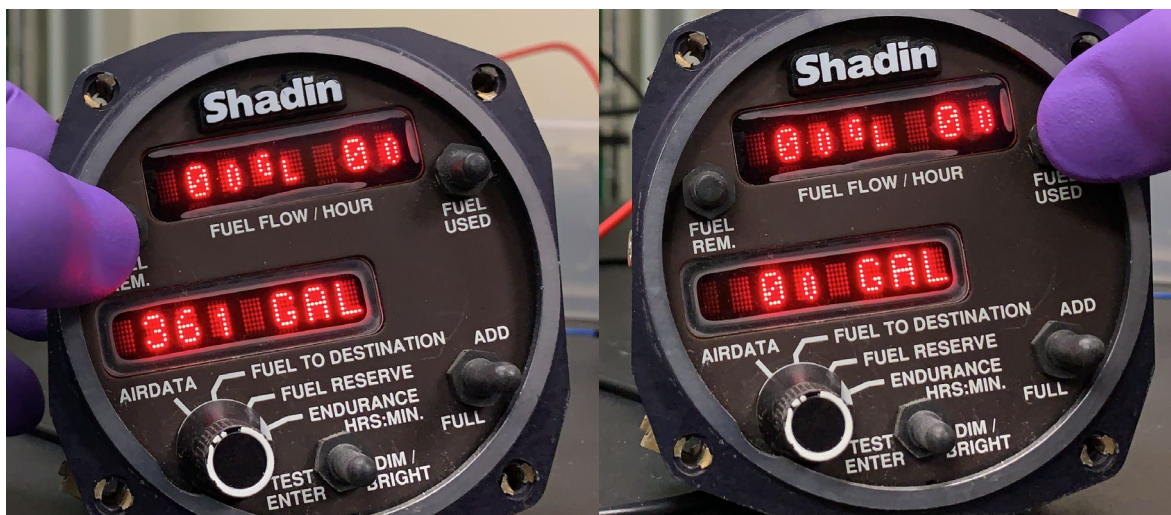


Figure 2. Fuel Remaining (Left) shows 36.1 Gallons and Fuel Used (Right) shows 0.0 Gallons.