

NATIONAL TRANSPORTATION SAFETY BOARD
Office of Aviation Safety
Washington, DC 20594

UNMANNED AIRCRAFT (UAS) AERIAL IMAGING

Feb 2, 2017

I. ACCIDENT

Operator	:	Key Lime Air
Aircraft	:	Fairchild SA227-AC, N765FA
Location	:	Camilla, GA
Date	:	December 5, 2016
Time	:	2222 (EST)
NTSB #	:	ERA17FA066

II. UAS AERIAL IMAGING GROUP

UAS Program Lead	:	Bill English National Transportation Safety Board Washington, DC
Member	:	Jim Allen Honeywell Phoenix, AZ

III. SUMMARY

On December 5, 2016, about 2222 eastern standard time, a Fairchild SA227-AC, N765FA, operating as Key Lime Air Flight LYM308, was destroyed during a descent and subsequent inflight breakup near Camilla, Georgia. The airline transport pilot was fatally injured. Night instrument meteorological conditions prevailed and an instrument flight rules flight plan was filed. The flight originated at Northwest Florida Beaches International Airport (ECP) Panama City, Florida and was destined for Southwest Georgia Regional Airport (ABY) Albany, Georgia. The on-demand cargo flight was conducted under the provisions of 14 Code of Federal Regulations Part 135.

IV. DETAILS OF IMAGING

The Group met at the wreckage site on December 7 at 1000. The IIC briefed the group on the accident scenario and areas that were needed to document wreckage. The group took video of the wreckage path, and still photos of the entire wreckage area for constructing an orthomosaic map. Photos were taken in accordance with preferred input criteria for the Pix4D photogrammetry software. Search for other wreckage in swampy areas was conducted using the live view of the UAS camera.

Equipment Used

The group used a DJI Phantom 3 Professional small UAS equipped with an FC250 optical camera and a DJI Inspire 1 small UAS equipped with an FC350 optical camera. Photos and videos were downloaded in full resolution and provided to the accident team. Still photos were loaded into Pix4D photogrammetry software to create an orthomosaic map of the wreckage area.

The orthomosaic was exported as a geo-tiff file and combined with ground based wreckage documentation and ATC radar data in Google Earth to create an overall map. Selected significant portions of the map and video were used to create the Video Wreckage Diagram.

Attachments:

Video Wreckage Diagram – Shelf Item

----- No more follows -----