DUTCH TRANSPORT SAFETY BOARD

Aviation Chamber

Occurrence #:	**2002083**	**Classification:**	**Accident**

FACTUAL INFORMATION

Date:	10-06-2002	Flight experience:	approx. 320 hours (approx. 47 hours on type)
Place:	Near Eindhoven		
Type of flight:	Cross country	POB passengers:	None
Type of aircraft:	Private aircraft	Injuries:	Serious injuries
Aircraft registration:	D-EHAE	Damage to aircraft:	Substantial
Aircraft model:	A.P. Robin DR 400/180R	Phase of operation:	En route
POB flight crew:	1	Flight conditions:	No contribution to accident

The flight and the accident

The intention was a cross country flight from Karlsruhe/Baden-Baden in Germany to Hilversum Airport, the Netherlands in visual flight conditions. The pilot stated that he had departed with a full 110 liters fuel tank. After more than 1,5 hours flying at an altitude between 3.500 and 4.500 feet the pilot contacted Dutch Mill flight information service and reported that he would like to divert to Volkel Airbase due to a possible fuel shortage. The Dutch Mill controller told him that Volkel was closed and offered him Eindhoven Airport as an option. The pilot changed course and reported Eindhoven Tower that he was coming in for landing *"due to low of fuel, because of minimum fuel"*. At that moment he had flown approximately 1 hour and 50 minutes. The aircraft was declared to 1.500 feet and over flew the city at that altitude. Suddenly the engine stopped. Unable to find a place to land safely he continued flying towards the airport. The pilot managed to restart the engine a couple of times but was unable to keep altitude. The pilot realized that he was too low to reach the runway and reported *"running out of fuel present time"*. Approximately 2 minutes later and 1 hour and 55 minutes after takeoff the aircraft crashed in a field during an emergency landing. The pilot stated that he had selected full flaps before impact. The airplane was considerably damaged and the pilot suffered light injuries.

Investigation & Analysis

Technical investigation of the fuel system revealed no explanation why the full fuel tank was empty within two hours. According the aircraft flight manual the endurance is approximately 3 flying hours. It could not be determined if the fuel low warning system had generated an indication in the cockpit when 25 liters remained in the tank. It was also not possible to prove that the tank was full at departure. During flights in the days prior to the accident the pilot had noticed a higher fuel consumption than he was used to and took this into account in the fuel calculation.

The D-EHAE after the accident

The pilot stated that he did not check the fuel gauge regularly during the accident flight. When he realized that he was running out of fuel he had underestimated the situation by not declaring an emergency. That's why the air traffic controller, unaware of the critical situation, allowed the aircraft to overfly the city at a low altitude involving considerable risk. Most likely the airspeed was too low during the emergency landing causing the aircraft to stall prior impact.

Note: This report has been published in English and Dutch language. If there are differences in interpretation the Dutch text prevails.