National Transportation Safety Board Washington, DC 20594

Brief of Accident

Adopted 02/28/2006

DFW06CA009 File No. 19168	10/22/2005	Reklaw, TX	Aircraft Reg No.	N555YF	Tim	e (Local): 12:45 CDT
Engine Make/ Aircraft Da Number of Er Operating Certific Type of Flight Ope	ate(s): None	on	Crew Pass	Fatal 0 0	Serious 0 0	Minor/None 1 1
Last Depart. Point: Rockwall, TX			Condition of Light: Day			
Destination: Same as Accident/Incident Location			Weather Info Src: Weather Observation Facility			
Airport Proximity: On Airport/Airstrip			Basic Weather: Visual Conditions			
Airport Name: Flying M Ranch			Lowest Ceiling: None			
Runway Identification: 02			Visibility: 10.00 SM			
Runway Length/Width (Ft): 3500 / 50			Wind Dir/Speed:			
Runway Surface: Grass/turf			Temperature (°C): 27			
Runway Surface Condition: Dry			Precip/Obscuration: No Obscuration; No Precipitation			
Pilot-in-Command Age: 62			Flight Time (Hours)			
Certificate(s)/Rating(s)			Total All Aircraft: 4300			
Airline Transport; Multi-engine Land; Single-engine Land			Last 90 Days: 69			
Instrument Ratings			Total Make/Model: 264			
Airplane			Total Instrument Time: 250			

After a 30-minute flight, the pilot landed his single-engine tricycle gear homebuilt airplane at a private 3,500-foot long, by 50-foot wide grass airstrip to attend a fly-in. The event hosted numerous airplanes, many with a similar tricycle gear design. The 4,300-hour airline transport pilot reported that the airplane touched down on the main landing gear at approximately 60 mph with full flaps. The pilot added that shortly after touchdown, during the landing roll on runway 02, the nose landing gear contacted "an irregularity in the landing surface" which caused the nose landing gear assembly to fold aft. Following the collapsed of the nose gear assembly, the propeller struck the ground and the airplane nosed over coming to rest in the inverted position. The canopy was crushed; however, both occupants were able to egress the airplane unassisted. Several of the pilots attending the fly-in witnessed the accident and later assisted in the recovery of the airplane from the runway. A couple of the pilots, who were also builders of the same model of airplane, were able to evaluate the condition of the landing surface, and failed to find any irregularities with the landing surface that could have contributed to this event. Another witness stated that the grass runway featured a slight 'dip' or grade and the touchdown zone of the runway "may have been slightly rougher that the rest of the runway." The homebuilt airplane had accumulated a total of 264.1 hours since new, and the pilot reported having accumulated a total of 264.1 hours in the make and model airplane. In the recommendation section of the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), the pilot recommends an "improved design for the tricycle-gear Vans aircraft." The homebuilt airplane is available in two options, tricycle or tailwheel configuration. A review of the accident data base revealed several similar events involving the tricycle gear configured airplanes. The reason for the failure of the nose landing gear assembly could not be determined.

Brief of Accident (Continued)

DFW06CA009 File No. 19168	10/22/2005	Reklaw, TX	Aircraft Reg No. N555YF	Time (Local): 12:45 CDT
Occurrence #1: Phase of Operation	ON GROUND/WATER ENCOUNTER WITH	I TERRAIN/WATER		
Findings 1. TERRAIN C 	ONDITION - GROUND			
Occurrence #2: Phase of Operation	NOSE GEAR COLLAPSED n: LANDING			
Findings 2. (C) REASON	N FOR OCCURRENCE UNDETERMINED			
Findings Legend: (C) = Cause, (F) = Factor			

The National Transportation Safety Board determines the probable cause(s) of this accident as follows. The failure of the nose landing gear assembly for undetermined reasons, resulting in a nose over.