Aviation Investigation Final Report

Location:	Omaha, Nebraska	**Accident Number:**	CHI06FA215
Date & Time:	August 4, 2006, 14:15 Local	**Registration:**	N330RM
Aircraft:	Manarin/Johnson Lancair IVP	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The Lancair was performing a forced landing, and during the landing, the airplane "slid across the field-runway," collided with a taxiing Piper PA-28-140 in the ramp/taxi area, and impacted an airport perimeter fence before coming to rest. The Lancair pilot reported that during a climbing left turn from crosswind to downwind the engine experienced a loss of power. He immediately began a glide back toward the airport while attempting to restart the engine. The flight instructor aboard the Piper reported that he and his student were taxiing to runway 12 when he noticed the Lancair about 50 yards behind his right wing traveling at a high speed toward their position. The Lancair impacted the aft-side of their right wing. The Lancair touched-down in the grass area alongside the northeastern edge of runway 12, approximately midfield. There were ground impressions, consistent with tire marks, which proceeded across the runway and into the grass area on the opposite side of the runway. The direction of travel was approximately 270 degrees magnetic. There were twelve propeller slash marks in the runway pavement. All three propeller blades of the Lancair exhibited tip curling, blade twist, and leading edge abrasion. The engine was sent to the manufacturer for an operational test run. The engine started on the first attempt and idled without excessive fluctuations in engine RPM. The engine did not experience any hesitation, stumbling, or interruption in engine operation at various power settings. The engine demonstrated the ability to produce rated horsepower.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undermined reasons, the unsuitable landing area selected by the

pilot during the forced landing, and his failure to maintain separation from the taxiing airplane. Contributing factors to the accident was the presence of the taxiing airplane and the airport perimeter fence.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)
Phase of Operation: LANDING - ROLL

Findings
2. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND
3. (F) OBJECT - AIRCRAFT MOVING ON GROUND
4. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings
5. (F) OBJECT - FENCE

Factual Information

On August 4, 2006, at 1415 central daylight time, an amateur-built Manarin/Johnson Lancair IVP, N330RM, piloted by a private pilot, experienced a loss of engine power shortly after takeoff from runway 12 (3,801 feet by 75 feet, concrete) at the Millard Airport, Omaha, Nebraska. During the subsequent forced landing, N330RM collided with a taxiing Piper PA-28-140, N55526. Visual meteorological conditions prevailed at the time of the accident. Both airplanes were substantially damaged during the ground collision. Both airplanes were operating under the provisions of 14 Code of Federal Regulations (CFR) Part 91. The occupants aboard both airplanes were not injured. N330RM had the intended destination of Spencer Municipal Airport (SPW), Spencer, Iowa, and N55526 was departing for a local instructional flight.

The Lancair pilot reported that during a climbing left turn from crosswind to downwind the engine experienced a loss of power. He immediately began a glide back toward the airport while attempting to restart the engine. During the forced landing, the airplane "slid across the field-runway," collided with another airplane in the ramp/taxiway area, and impacted an airport perimeter fence before coming to rest. The pilot and his passenger were able to exit the airplane without injury.

The flight instructor aboard the Piper reported that he and his student were taxiing to runway 12 when he noticed an airplane about 50 yards behind his right wing traveling at a high speed toward their position. The airplane impacted the aft-side of their right wing. After the impact, the flight instructor told his student to stop the airplane as he pulled the fuel mixture to idle/cutoff. After coming to a full stop, the flight instructor and student exited the airplane without injury. The flight instructor noted that Lancair pilot did not make a distress call over the common traffic advisory frequency (CTAF) advising of their emergency or intention to land.

The Lancair touched-down in the grass area alongside the northeastern edge of runway 12, approximately midfield. There were ground impressions, consistent with tire marks, which proceeded across the runway and into the grass area on the opposite side of the runway. The direction of travel was approximately 270 degrees magnetic. There were twelve propeller slash marks in the runway pavement. The Lancair came to rest entangled in the airport perimeter fence adjacent to a vehicle parking area. All three propeller blades exhibited tip curling, blade twist, and leading edge abrasion.

The engine, a Teledyne Continental Motors TSIO-550-B1B, serial number 802065, was sent to the manufacturer for an operational test run under the supervision of the NTSB investigator-in-charge. The engine was installed in a test cell and outfitted with a test club propeller. The engine started on the first attempt and idled without excessive fluctuations in engine RPM. The engine speed was increased incrementally to 2,600 RPM over a period of 25 minutes. The

engine ran at each incremental power setting for a period of 5 minutes without anomaly. The engine throttle was then cycled several times between idle and maximum power settings in quick succession. The engine did not experience any hesitation, stumbling, or interruption in engine operation during the engine test run. The engine demonstrated the ability to produce rated horsepower.

The engine was last inspected on May 5, 2006, at 755.1 hours total time, during an annual condition inspection. The engine was last overhauled on May 23, 2002, and had accumulated 304.1 hours since the overhaul.

Pilot Information

Certificate:	Private	**Age:**	61,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	March 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	1200 hours (Total, all aircraft), 700 hours (Total, this make and model), 25 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Manarin/Johnson	**Registration:**	N330RM
Model/Series:	Lancair IVP	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	LIV-044
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	May 1, 2006 Condition	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	755 Hrs as of last inspection	**Engine Manufacturer:**	Teledyne Continental
ELT:	Installed, not activated	**Engine Model/Series:**	TSIO-550-B1B
Registered Owner:	Manarin Investment Counsel, Ltd.	**Rated Power:**	350 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	MLE,1051 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	14:10 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots / 17 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	140°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	31°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Omaha, NE (MLE)	**Type of Flight Plan Filed:**	None
Destination:	Spencer, IA (SPW)	**Type of Clearance:**	None
Departure Time:	14:15 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Millard Airport MLE	**Runway Surface Type:**	Concrete
Airport Elevation:	1051 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	12	**IFR Approach:**	None
Runway Length/Width:	3801 ft / 75 ft	**VFR Approach/Landing:**	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	41.196109,-96.111946

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	Dan Petersen; Federal Aviation Adminstration - Lincoln FSDO; Lincoln, NE
Original Publish Date:	March 31, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64295

Aviation Investigation Final Report

Location:	Omaha, Nebraska	**Accident Number:**	CHI06FA215
Date & Time:	August 4, 2006, 14:15 Local	**Registration:**	N55526
Aircraft:	Piper PA-28-140	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The Lancair was performing a forced landing, and during the landing, the airplane "slid across the field-runway," collided with a taxiing Piper PA-28-140 in the ramp/taxi area, and impacted an airport perimeter fence before coming to rest. The Lancair pilot reported that during a climbing left turn from crosswind to downwind the engine experienced a loss of power. He immediately began a glide back toward the airport while attempting to restart the engine. The flight instructor aboard the Piper reported that he and his student were taxiing to runway 12 when he noticed the Lancair about 50 yards behind his right wing traveling at a high speed toward their position. The Lancair impacted the aft-side of their right wing. The Lancair touched-down in the grass area alongside the northeastern edge of runway 12, approximately midfield. There were ground impressions, consistent with tire marks, which proceeded across the runway and into the grass area on the opposite side of the runway. The direction of travel was approximately 270 degrees magnetic. There were twelve propeller slash marks in the runway pavement. All three propeller blades of the Lancair exhibited tip curling, blade twist, and leading edge abrasion. The engine was sent to the manufacturer for an operational test run. The engine started on the first attempt and idled without excessive fluctuations in engine RPM. The engine did not experience any hesitation, stumbling, or interruption in engine operation at various power settings. The engine demonstrated the ability to produce rated horsepower.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The selection of an unsuitable landing area by the pilot of the other airplane, and his failure to

maintain separation during landing.

Findings

Occurrence #1: COLLISION BETWEEN AIRCRAFT (OTHER THAN MIDAIR)
Phase of Operation: TAXI - TO TAKEOFF

Findings
1. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT OF OTHER AIRCRAFT
2. (C) CLEARANCE - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT

Factual Information

On August 4, 2006, at 1415 central daylight time, an amateur-built Manarin/Johnson Lancair IVP, N330RM, piloted by a private pilot, experienced a loss of engine power shortly after takeoff from runway 12 (3,801 feet by 75 feet, concrete) at the Millard Airport, Omaha, Nebraska. During the subsequent forced landing, N330RM collided with a taxiing Piper PA-28-140, N55526. Visual meteorological conditions prevailed at the time of the accident. Both airplanes were substantially damaged during the ground collision. Both airplanes were operating under the provisions of 14 Code of Federal Regulations (CFR) Part 91. The occupants aboard both airplanes were not injured. N330RM had the intended destination of Spencer Municipal Airport (SPW), Spencer, Iowa, and N55526 was departing for a local instructional flight.

The Lancair pilot reported that during a climbing left turn from crosswind to downwind the engine experienced a loss of power. He immediately began a glide back toward the airport while attempting to restart the engine. During the forced landing, the airplane "slid across the field-runway," collided with another airplane in the ramp/taxiway area, and impacted an airport perimeter fence before coming to rest. The pilot and his passenger were able to exit the airplane without injury.

The flight instructor aboard the Piper reported that he and his student were taxiing to runway 12 when he noticed an airplane about 50 yards behind his right wing traveling at a high speed toward their position. The airplane impacted the aft-side of their right wing. After the impact, the flight instructor told his student to stop the airplane as he pulled the fuel mixture to idle/cutoff. After coming to a full stop, the flight instructor and student exited the airplane without injury. The flight instructor noted that Lancair pilot did not make a distress call over the common traffic advisory frequency (CTAF) advising of their emergency or intention to land.

The Lancair touched-down in the grass area alongside the northeastern edge of runway 12, approximately midfield. There were ground impressions, consistent with tire marks, which proceeded across the runway and into the grass area on the opposite side of the runway. The direction of travel was approximately 270 degrees magnetic. There were twelve propeller slash marks in the runway pavement. The Lancair came to rest entangled in the airport perimeter fence adjacent to a vehicle parking area. All three propeller blades exhibited tip curling, blade twist, and leading edge abrasion.

The engine, a Teledyne Continental Motors TSIO-550-B1B, serial number 802065, was sent to the manufacturer for an operational test run under the supervision of the NTSB investigator-in-charge. The engine was installed in a test cell and outfitted with a test club propeller. The engine started on the first attempt and idled without excessive fluctuations in engine RPM. The engine speed was increased incrementally to 2,600 RPM over a period of 25 minutes. The

engine ran at each incremental power setting for a period of 5 minutes without anomaly. The engine throttle was then cycled several times between idle and maximum power settings in quick succession. The engine did not experience any hesitation, stumbling, or interruption in engine operation during the engine test run. The engine demonstrated the ability to produce rated horsepower.

The engine was last inspected on May 5, 2006, at 755.1 hours total time, during an annual condition inspection. The engine was last overhauled on May 23, 2002, and had accumulated 304.1 hours since the overhaul.

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	25,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	March 1, 2006
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	February 1, 2006
Flight Time:	1449 hours (Total, all aircraft), 900 hours (Total, this make and model), 1382 hours (Pilot In Command, all aircraft), 210 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	40,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	November 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	30 hours (Total, all aircraft), 18 hours (Total, this make and model), 0 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N55526
Model/Series:	PA-28-140	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	28-7325427
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	July 1, 2006 Annual	**Certified Max Gross Wt.:**	2150 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	11030 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	L-37859-27A
Registered Owner:	Husker Aircraft Repair, Inc.	**Rated Power:**	140 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	MLE,1051 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	14:10 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots / 17 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	140°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	31°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Omaha, NE (MLE)	**Type of Flight Plan Filed:**	None
Destination:	Omaha, NE (MLE)	**Type of Clearance:**	None
Departure Time:	14:15 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Millard Airport MLE	**Runway Surface Type:**	Concrete
Airport Elevation:	1051 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	12	**IFR Approach:**	None
Runway Length/Width:	3801 ft / 75 ft	**VFR Approach/Landing:**	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	41.196109,-96.111946

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	Dan Petersen; Federal Aviation Adminstration - Lincoln FSDO; Lincoln, NE
Original Publish Date:	March 31, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64295