

When Things Go Wrong with Flight Training

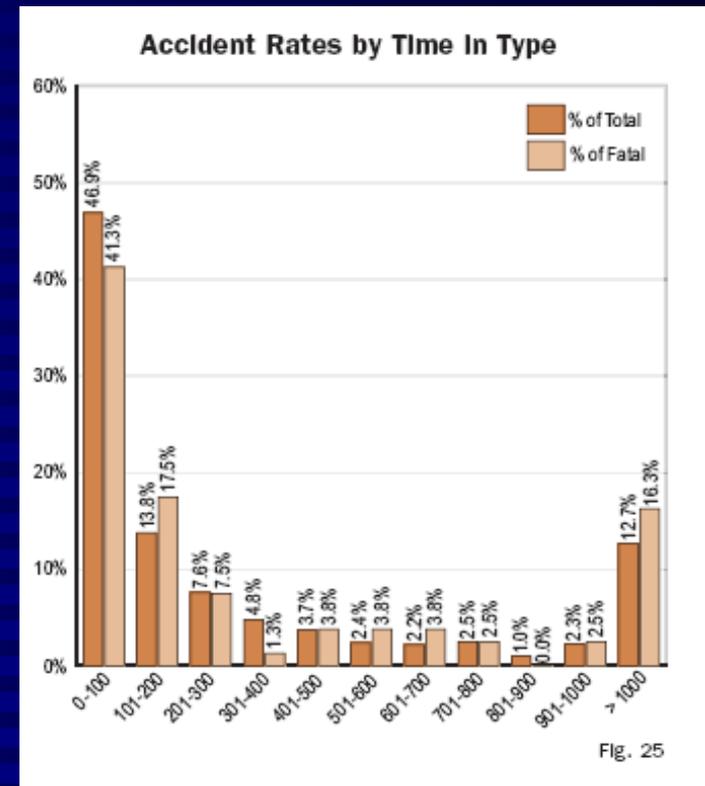
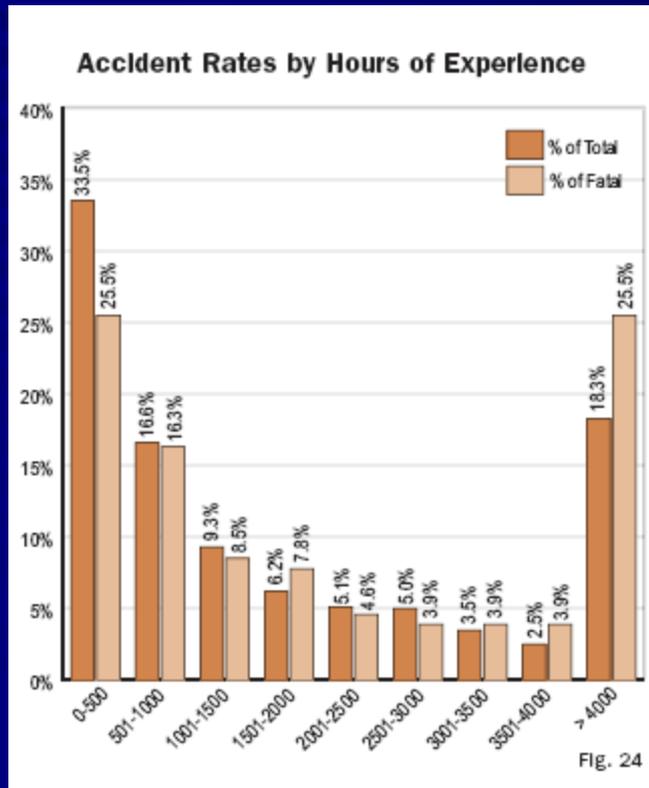


When Things Go Wrong with Flight Training

- Areas of Concern—Thoughts from a DPE
- Accident Review
- CFI Survival Guide



The Killing Zone



Areas of Concern--Thoughts from a DPE

- Flight instruction industry is a revolving door
- Average new instructor has less than 500 total hours and lasts less than 2 years in industry
- Imagine impact of this on GA pilot population
- The true cost of poor flight instruction— GA has highest accident rate—why?
 - Instructors lack skill and knowledge and experience
 - Instructors teaching mechanical versus cognitive skill development---
 - Pilots unprepared for responsibility of certificate

Pilot Certificates

■	Year	<u>Student</u>	Rec	<u>Private</u>	<u>Commercial</u>	<u>ATP</u>	Other	Total	CFI
■	2002	85,991	318	260,845	137,504	147,104	29,596	661,358	86,089
■	2001	94,420*	318	261,927	137,636	146,989	16,200	657,490	82,875
■	2000	99,110*	340	251,561	121,858	141,598	17,162	631,629	80,931
■	1999	99,184*	343	258,749	124,261	137,642	17,118	637,297	79,694
■	1998	97,736	305	247,226	122,053	134,612	16,366	618,298	79,171
■	1997	96,101	284	247,604	125,300	130,858	16,195	616,342	78,102
■	1996	94,947	265	254,002	129,187	127,486	16,374	622,261	78,551
■	1995	101,279	232	261,399	133,980	123,877	18,417	639,184	77,613
■	1994	96,254	241	284,236	138,728	117,434	17,195	654,088	76,171
■	1993	103,583	206	283,700	143,014	117,071	17,495	665,069	75,021
■	1992	114,597	187	288,078	146,385	115,855	17,857	682,959	72,148
■	1991	120,203	161	293,306	148,365	112,167	17,893	692,095	69,209
■	1990	128,663	87	299,111	149,666	107,732	17,400	702,659	63,775

Doubled number of flight instructors in last 20 years while losing more than 100,000 pilots

SEGMENT	Year	Flight Hours	Total	ACCIDENTS		ACCIDENT RATE	
				Fatal	Fatalities	Total	Fatal
Large Air Carrier	1996	13,746,112	37	5	380	0.27	0.04
	1997	15,838,109	49	4	8	0.31	0.03
	1998	16,813,435	50	1	1	0.30	0.01
	1999	17,555,208	52	2	12	0.30	0.01
	2000	18,295,143	57	3	92	0.31	0.02
	2001P	16,730,700	40	6	531	0.24	0.04
Commuter	1996	2,756,755	11	1	14	0.40	0.04
	1997	982,764	16	5	46	1.63	0.51
	1998	353,670	8	0	0	2.26	0.00
	1999	342,731	13	5	12	3.79	1.46
	2000	373,649	12	1	5	3.21	0.27
	2001P	330,500	7	2	13	2.12	0.61
Air Taxi	1996	3,220,000	90	29	63	2.80	0.90
	1997	3,098,000	82	15	39	2.65	0.48
	1998	3,802,000	77	17	45	2.03	0.45
	1999	3,298,000	73	12	38	2.21	0.36
	2000	3,553,000	81	22	71	2.28	0.62
	2001P	3,400,000	72	18	60	2.12	0.53
General Aviation	1996	24,881,000	1,908	361	636	7.67	1.45
	1997	25,591,000	1,845	350	631	7.21	1.37
	1998	25,518,000	1,904	364	624	7.46	1.43
	1999	29,713,000	1,906	340	619	6.41	1.14
	2000	29,057,000	1,838	343	594	6.33	1.18
	2001P	26,220,000	1,721	321	553	6.56	1.22

GA accident rate is 25 times higher than Air Carrier

Inexperience Hurts

- 40 hours total time to Private
- 250 hours total time to Commercial
- No additional flight time req'd for CFI
- No additional flight time required for multi or MEI (FAR 61.63)
- High Risk activity taught by mostly inexperienced individuals

What Should I Teach?

It Depends



Areas of Concern--Thoughts from a DPE—Preflight/ Taxiing

■ Flight Check

- Passenger brief
- Taxiing with brakes on
- Manipulating misc. controls while taxiing

Areas of Concern--Thoughts from a DPE--Navigation

■ Flight Check

- Poor Preflight Planning
 - Poor Choice of Visual Checkpoints
 - Checkpoints too far apart
 - Timing is not a consideration
 - No correlation of KIAS to KTAS to KGS on ground
- Panel Not set up for Cross Country departure
 - Radio Frequencies/ VOR Frequencies not set
 - GPS Direct To
 - Chart Improperly folded
 - Departure Time not noted

Areas of Concern--Thoughts from a DPE—Takeoff/ Landings

■ Pattern Work

- Airspeed Control: most are way too fast for type aircraft.
 - DA20-A1 80 HP Rotax
 - DA 20-100 100 HP Rotax 912 37 KIAS V_{so}/ 57 KIAS Approach
 - DA20-C1 125 HP TCM IO240B 34 KIAS V_{so}/ 52 KIAS Approach
- Altitude Control varies from 1300-1600' MSL at MO6
- Out of Control – too high too fast, overshoot 5000' runways and no attempt to go around!!!??!?!!!!

Areas of Concern--Thoughts from a DPE—Knowledge Test

- 2/3 of applicants do not study anything but test guides
- Most cfi candidates have not read AC 61-67
- Most cfi candidates cannot teach spins and many have not performed more than two spins in training

Areas of Concern--Thoughts from a DPE—INSTRUMENTS

- 2/3 of recent instrument rated GA pilots cannot complete an IPC to PTS standards
- This has led to a number of accidents

Areas of Concern--Thoughts from a DPE-Landings

- Touchdown aim point is non existent
- Slips are weak
- PTS Standard:
 - “Maintains a stabilized approach and recommended airspeed (AFM) or in its absence not more than $1.3 V_{so}$, +10 knots/-5 knots.
 - Touches down at or within 400 feet beyond a specified point with no drift on the centerline

Areas of Concern--Thoughts from a DPE-Landings

- Checklist usage non existent
- Takeoffs & Landings



Areas of Concern--Thoughts from a DPE- Emergencies

- Rote understanding at best
- “I would do, I would do, I would do” but no attempt to do.
- Flow but no checklist
- Reluctant to attempt to land on a runway within gliding range
- No idea how to transition from a cruise altitude emergency to divert to an airport, stay high and spiral down.

ACCIDENT REVIEW



(John Smierciak/Chicago)



15 Year Layoff

- Pilot gets training in 1987 from local instructor for Private Pilot certificate
- Purchases C210 and flies for about 3 years accruing 150 hours.
- Quits flying



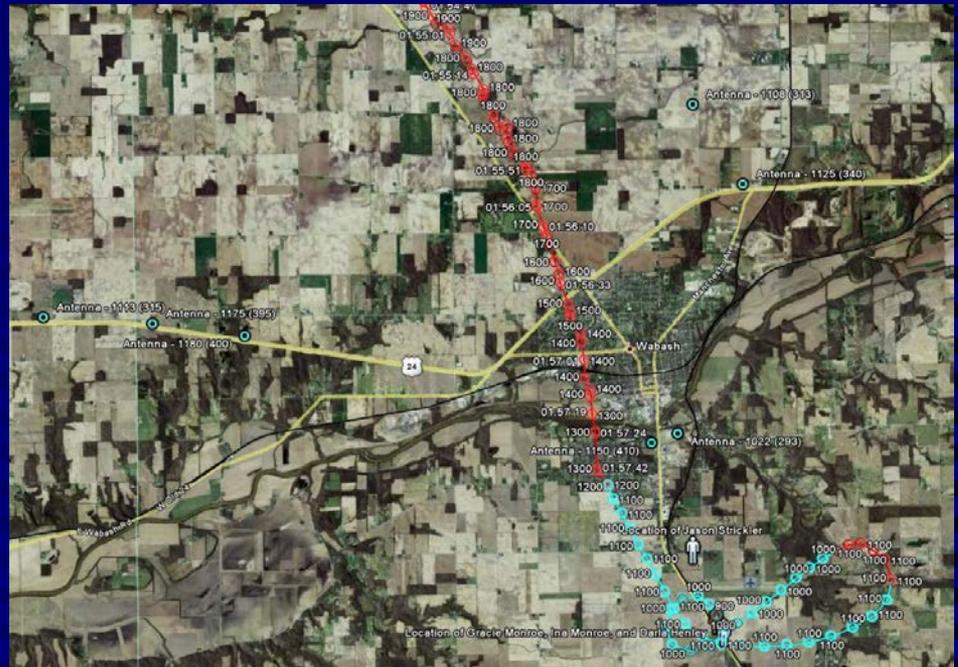
15 Year Layoff

- June 2005, Pilot purchases PA 32-300 and gets six lessons from former instructor.
- Gets flight review endorsed.
- No night flights conducted



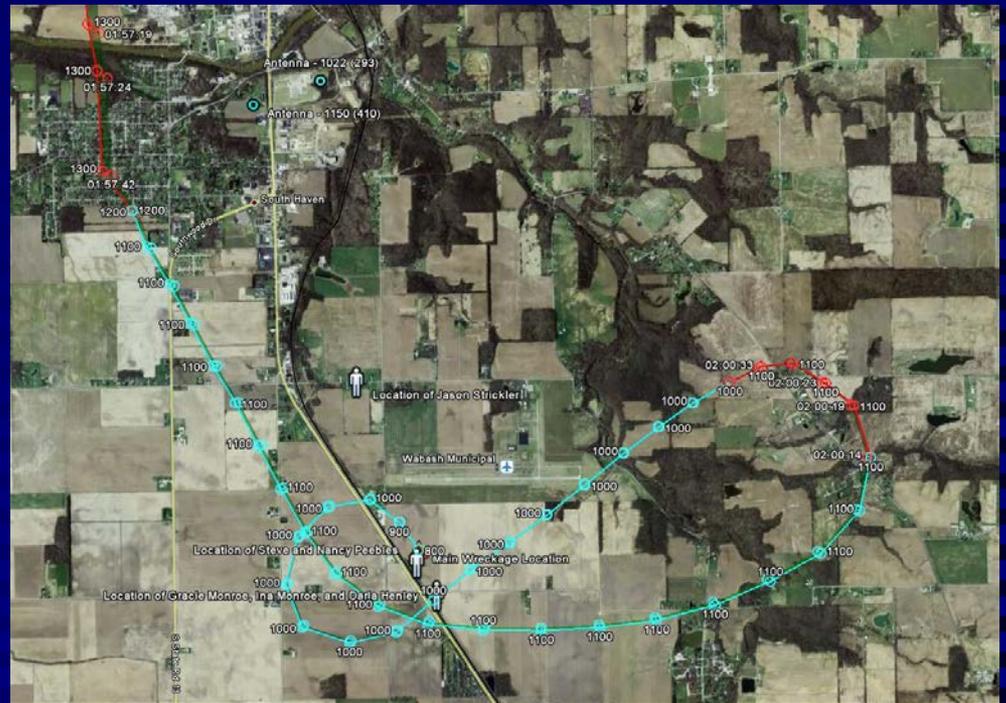
15 Year Layoff

- Takes family on flight for dinner –returns after dark.
- Mode C shows aircraft flying at 1200' agl for most of flight then begins descent to 600' agl over town of Wabash



15 Year Layoff

- Radar and witness reconstructed flight path shows pilot wandering around airport at 1100-1200 feet MSL (300-400 feet agl)
- Pilot is 400-500 feet below pattern altitude.



15 Year Layoff

- Pilot impacts soy bean field alongside runway- all four fatal.
- Witnesses state runway lights are off.



15 Year Layoff

- Does pilot know how to operate aircraft lighting at night?
- Does pilot know how to operate airport lighting at night?
- Does pilot know how to judge altitude at night?

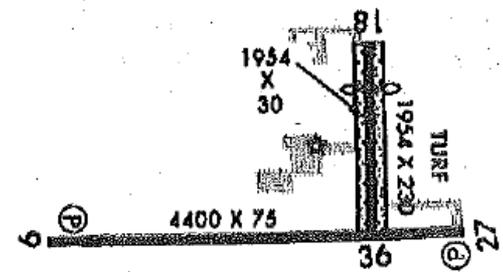


15 Year Layoff

- Night time operations



WABASH— Wabash Municipal (IWH). Location: 3 mi. SE of city. Coordinates: N40-45.72; W085-47.93. Mag var: 3W. Nav aids: GUS 108.45 068 17.6; IWH 329 on field. Telephone: 260/563-4705. Fax: 260/563-2785. Hours: 8 am to 6 pm. Elevation: 796. Pattern altitudes: 1597 MSL light aircraft; 1796 MSL multiengine aircraft. Runways: 18-36 1,938 × 30, asphalt; trees ea end, lights LIRL (NSTD)/ 9-27 4,401 × 75, asphalt; road ry 9; trees ry 27, lights PCL. Lights: 24 hrs, 122.8 (5 clicks in 5 sec, med intensity; 7 clicks in 5 sec, high intensity); beacon. Obstructions: powerlines W; trees N. Fees: hangar. Approaches: GPS RNAV, NDB, VOR. FSS: Terre Haute 122.65, 866/224-9906. Com freq: APP Grissom/121.05, Chicago Center/121.05; UNICOM/CTAF 122.8. Charts: Chicago; L23. Transportation: van. Rental cars: Denny Motor 563-1175; U-Save 563-1565. Restaurants: Ugaldes 2 mi 563-7451. Lodging: Wabash Days Inn 1 1/2 mi 563-7451. Local attractions: Missisquoi Reservoir; Salamoni Reservoir. Notes: Extensive ultralight t/c on ry 18-36, agricultural ops, ultralights.



5% **Northern Indiana Aviation:** 219/563-4705. Fax: 219/563-2785. Location: CTR. Hours: 8 am to 6 pm Mon thru Sat; 12:30 to 5:30 Sun. Computerized weather svc: Y. Frequency: 122.8. Fuel: Phillips 100LL, Jet-premix; Self service: 24 hrs.



15 Year Layoff

- Adequate flight review?
 - What did you teach or review
 - What did you not teach or review?



Monkey See, Monkey Do



- Piper PA-34-220T,
N4171Z
- Accident Location:
near Tomball, TX
- Date of Accident:
11/6/2005

Monkey See, Monkey Do

- At about 0755 CST, on Sunday, November 6, 2005, a Piper PA-34-220T call sign N4171Z, was destroyed upon impact with terrain following a loss of control while making an instrument approach to runway 17R at David Wayne Hooks Municipal Airport (DWH). An instrument flight rules flight plan was filed for the flight and low IMC (instrument meteorological conditions) prevailed. (NTSB Full Factual Report page 1).
- The pilot and his grandson departed for the personal flight from Gillespie County Airport (T82), near Fredericksburg, Texas, about one hour and twelve minutes prior to the accident. Weather at the time of departure was 700 feet overcast. The pilot, Mr. James Little, was briefed by San Angelo AFSS that the weather at Gillespie County Airport was 700 foot overcast. (see brief below)

HOUSTON, TEXAS

AL-5457 (FAA)

LOC I-HEW 110.5 Chan 42	APP CRS 168°	Rwy Idg TDZE Apt Elev	6012 152 152
-------------------------------	-----------------	-----------------------------	--------------------

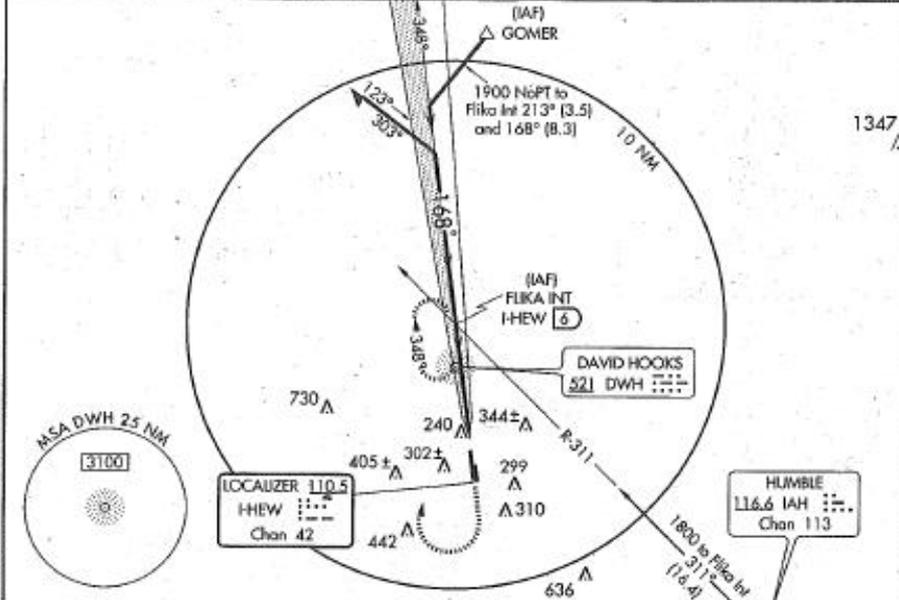
LOC RWY 17R

HOUSTON/DAVID WAYNE HOOKS MEMORIAL (DWH)

Obtain local altimeter setting on CTAF; when not received, use George Bush Intercontinental/Houston altimeter setting.
NA

MISSED APPROACH: Climb to 1000 then climbing right turn to 1800 direct DWH NDB and hold.

ATIS 124.95	HOUSTON APP CON 119.7 281.4	HOOKS TOWER* 127.4 354.1 EAST 118.4 (CTAF) 354.1 WEST	GND CON 121.8 239.0	CINC DEL 119.45	UNICOM 122.95
----------------	--------------------------------	---	------------------------	--------------------	------------------

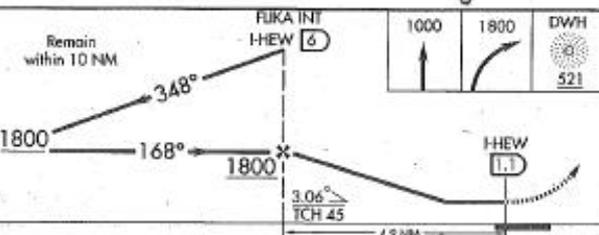


SC-5, 27 OCT 2005 to 22 DEC 2005

SC-5, 27 OCT 2005 to 22 DEC 2005



ADF REQUIRED



CATEGORY	A	B	C	D
S-17R	620-1 468 (500-1)	620-1 1/2 468 (500-1 1/2)	620-1 1/4 468 (500-1 1/4)	620-1 1/2 468 (500-1 1/2)
CIRCLING	640-1 488 (500-1)	660-1 508 (600-1)	660-1 1/2 508 (600-1 1/2)	720-2 568 (600-2)
GEORGE BUSH INTERCONTINENTAL/HOUSTON ALTIMETER SETTING MINIMUMS				
S-17R	660-1	508 (600-1)	660-1 1/2	508 (600-1 1/2)
CIRCLING	680-1 528 (600-1)	700-1 548 (600-1)	700-1 1/2 548 (600-1 1/2)	720-2 568 (600-2)

HOUSTON, TEXAS
Amdt 1: 08074

HOUSTON/DAVID WAYNE HOOKS MEMORIAL (DWH)
LOC RWY 17R

Monkey See, Monkey Do

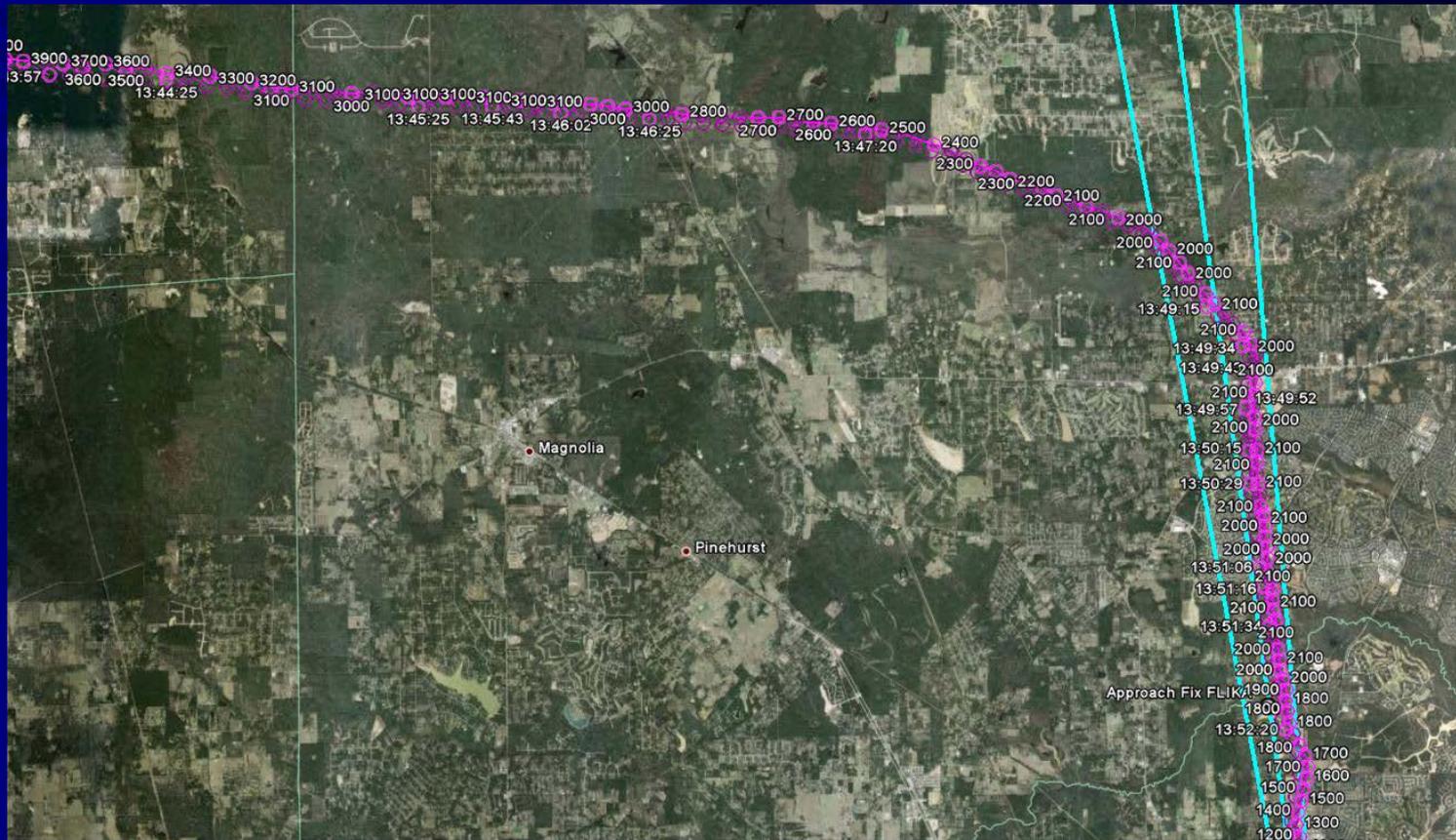
At 1348 the aircraft was cleared for a LOC 17R approach to DWH by Houston Approach Control. (FAA Accident Package Section 3).

Weather at David Wayne Hooks Memorial Airport (DWH) at 0753 CST was reported winds calm, visibility 3 miles, skies 300 foot overcast with fog, temperature 22 degrees Celsius, dew point 22 degrees Celsius, and altimeter 30.04. (NTSB Full Factual Report page 4).

The aircraft proceeded to fly the LOC 17R approach. Radar flight path reconstruction reveals the aircraft was not flying a coupled autopilot approach.

At 1354:04 ATCT advised the pilot, Robert Little, that he was low and to check his altitude. At that point the aircraft was at 500 feet MSL or 120 feet below the minimum altitude for the segment.

Monkey See, Monkey Do



Monkey See, Monkey Do

- Mr. Little advised he was climbing back up and going missed approach. Instead the aircraft climbed back to 800 feet MSL (180 feet above the MDA) and did not go missed approach. Witnesses heard the aircraft power up as if in a missed approach but then saw the aircraft come out of the clouds moments later. (NTSB Full Factual page 1d).
- At 1354:50 Mr. Little reported he had the tower in sight and requested permission to land. The Seneca was beyond the missed approach point and the pilot knew it and he then aborted the missed approach and continued a circling approach to land contrary to 14 CFR 91.175 and prudent piloting procedures.
- Mr. John Cashin, the tower controller, reported he briefly heard and then saw the aircraft in close proximity to the tower, and then the aircraft disappeared from sight .
- Witnesses on the ground observed the Seneca come out of the fog at or below 300 feet AGL in a steep bank to the left with a large rate of descent. Witnesses observed the aircraft begin to level the wings but heading now in a northeasterly direction and then impact the ground.

Monkey See, Monkey Do

- Mr. Robert James Little occupied the front left seat and held an airplane single and multi engine instrument pilot certificate with an instrument airplane rating. According to Mr. Little's pilot logbook, his last recorded flight before the date of the accident as well as his last recorded flight in the accident aircraft occurred on October 29, 2005 and consisted of 2.7 hours.
- Mr. Little's pilot logbook shows Mr. Little having flown 42.7 total hours in the accident aircraft since October 6, 2005.
- Mr. Little had only 3.9 hours of logged actual instrument flight time in the accident airplane—all of which occurred on a cross country flight with Mr. Easterling, his flight instructor. (NTSB Full Factual Report p 1-1a, Little, Robert Pilot Logbook)

Monkey See, Monkey Do

- Almost half of CFI Lance Mr. Easterling's claimed total time in a multi-engine aircraft is under instrument conditions. It is unlikely that this is an accurate representation of the real amount of instrument time he has flown.
- It is more typical that about 10 to 15% of his total time in a multi-engine aircraft would be instrument time, not close to 50%. By "fat-fingering" his own experience, Mr. Easterling set a poor example to his students that fraudulent statements and/or entries are acceptable behavior

Monkey See, Monkey Do

- At the time of his October 18, 2005 application for an additional rating, Mr. Little reported having 1783 total hours flight experience with 1700 of those hours as Pilot in Command (PIC) time. He also reported having 350 total instrument flight hours—those hours and experience have been greatly overstated by Mr. Little as explained elsewhere in this report. (Little, Robert-FAA Certification Records)

Monkey See, Monkey Do

- Mr. Little logged instrument approaches at airports that did not record actual instrument weather on numerous occasions. For example, on June 6, 2005 Mr. Little recorded 1.4 hours of actual instrument time and one approach when in fact KSPS was VFR all day. He did the same thing for his return trip as well as well as other flights. This is contrary to 14 CFR 61.51 and 14 CFR 61.59 and calls into question his true instrument flight experience.
- Analysis of Mr. Little's instrument flight experience in 2005 shows that he did not fly many of the "actual approaches" recorded in his logbook simply because instrument meteorological conditions (IMC) did not exist at the airports on the days he claimed to have performed an actual instrument approach. In addition, Mr. Little did not log approaches as specified in 14 CFR 61.51(g), in that he did not specify many times, the location and type of approach.

Monkey See, Monkey Do

- Mr. Little logged an actual IMC instrument approach on October 6, 2005 at Little Rock, AR. Mr. Easterling confirmed this event in his deposition (page 62). Mr. Little's logbook was endorsed by Mr. Easterling certifying that he gave Mr. Little instruction on the actual approach to KLIT.
- Weather reports show that actual instrument conditions did not exist at KLIT on October 6, 2005. Therefore the logbook entry by Mr. Easterling incorrectly records the training given. Since Mr. Easterling was Mr. Little's only flight instructor, it is likely that Mr. Easterling's "fat fingering" of log book times contrary to 14 CFR 61.51 was adopted by Mr. Little as common practice and led to Mr. Little being unqualified to fly the instrument approach on the day of the accident.

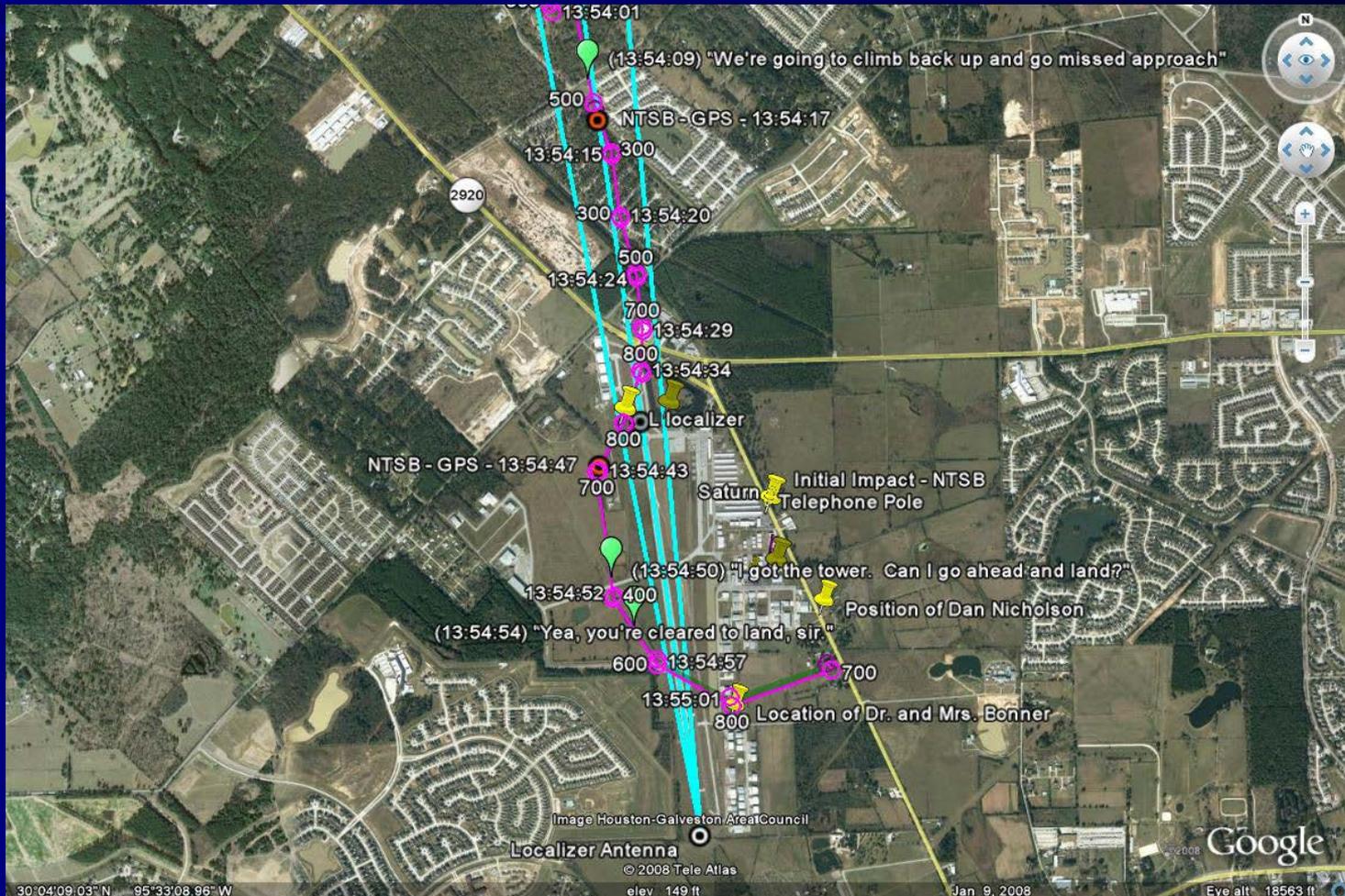
Monkey See, Monkey Do

- 14 CFR Section 61.59 states, “Falsification, reproduction, or alteration of applications, certificates, logbooks, reports, or records.”
- (a) No person may make or cause to be made:
 - (1) Any fraudulent or intentionally false statement on any application for a certificate, rating, authorization, or duplicate thereof, issued under this part;
 - (2) Any fraudulent or intentionally false entry in any logbook, record, or report that is required to be kept, made, or used to show compliance with any requirement for the issuance or exercise of the privileges of any certificate, rating, or authorization under this part;

Monkey See, Monkey Do

- The flight path reconstruction shows the Seneca flying the Localizer 17L approach at David Wayne Hooks airport. The pilot was given radar vectors to intercept the final approach course and was cleared for the LOC RWY 17R approach at 1348 (FAA Accident Package).
- The pilot then flew outside of the lateral bounds of the localizer twice after passing the FLIKA final approach fix (FAF) at 1352:29 and again at 1353:29. A prudent instrument pilot would have gone missed approach at that point.
- The pilot flew well below the published minimum decision altitude (MDA) for category A & B aircraft (620' MSL) and category D aircraft (720' MSL) after passing FLIKA at 13:53:43 until 13:54:29. The pilot was over 300 feet low (cat A & B) for the approach at 300 feet MSL without any indication from him that he had the runway environment in sight.

Monkey See, Monkey Do



One Hour Checkride

- Piper PA-28-235, N8966W
- West Union, Iowa
- Easter Sunday
March 27, 2005
- Family rides



One Hour Checkride

- Mr. Andrew Stewart Bryan was the pilot in command of the accident aircraft and occupied the left pilot seat and held a private pilot certificate issued February 10, 2005, with an airplane single engine land rating. Mr. Andrew Bryan was 28 years old. Mr. Andrew Bryan reported having sixty hours total time when applied for his private pilot certificate on December 28, 2004.

One Hour Checkride

- Mr. Andrew Bryan completed an FAA 8710-1 Airman Certificate and /or Rating Application on December 28, 2004, in preparation for his FAA Private Pilot checkride. It is apparent from reviewing the 8710-1 that Mr. Nathan Howdon, his flight instructor, signed a blank FAA 8710-1 form contrary to recommended flight instructor practices.

V. Applicant's Certification — I certify that all statements and answers provided by me on this application form are complete and true to the best of my knowledge and I agree that they are to be considered as part of the basis for issuance of any FAA certificate to me. I have also read and understand the Privacy Act statement that accompanies this form.	
Signature of Applicant 	Date 12-28-2004
FAA Form 8710-1 (4-00) Supersedes Previous Edition	NSN: 0052-00-002-5007

Instructor's Recommendation			
I have personally instructed the applicant and consider this person ready to take the test:			
Date 12-26-2004	Instructor's Signature (Print Name & Sign) Nathan Howdon Nathan Howdon	Certificate No: 2746634CFI	Certificate Expires 12/06
Air Agency's Recommendation			
The applicant has successfully completed our _____ course, and is recommended for certification or rating without further _____ test.			
Date	Agency Name and Number	Officials Signature	
		Title	

One Hour Checkride

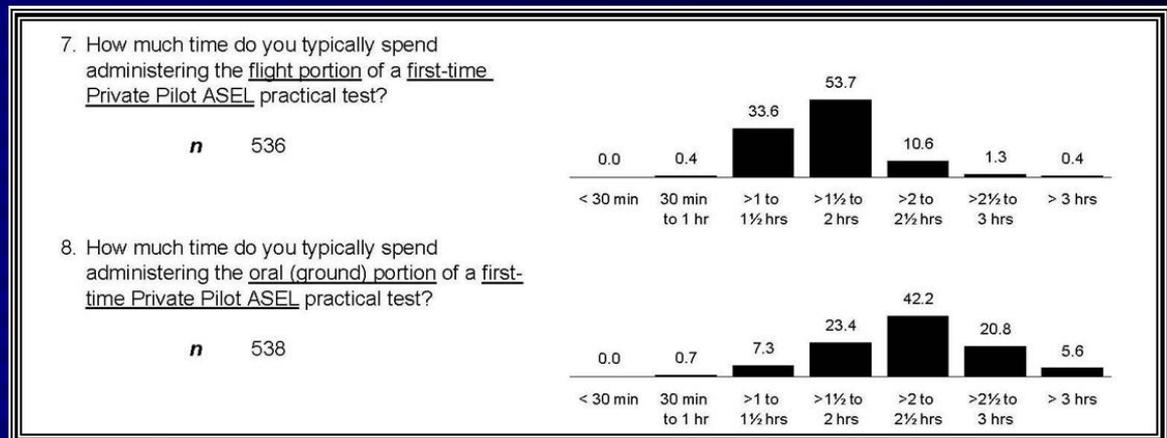
- Mr. Andrew Bryan did not meet the minimum requirements to take the Private Pilot Practical Test on December 28, 2004 and therefore it was also improper for Mr. Howdon to sign the 8710-1 endorsing Mr. Andrew Bryan to take the checkride.
- Mr. Nathan Howdon did not instruct Mr. Andrew Bryan in rejected takeoff procedures as described in the Airplane Flying Handbook. Mr. Howdon also did not instruct Mr. Greg Bryan in rejected takeoff procedures. There is no record in Mr. Andrew Bryan's or in Mr. Greg Bryan's logbooks that they received this training from Mr. Howdon. Instructors are required to document all training given to pilots. Had Mr. Andrew Bryan been instructed in proper rejected takeoff procedures it is possible this accident could have been averted.

One Hour Checkrides

- Mr. Andrew Bryan completed a Private Pilot checkride on February 10, 2005, with Mr. C.D. Tomkins, a Designated Pilot Examiner CE-01-4. According to the FAA Form 8710-1, the checkride consisted of a 1.2 hour oral exam and a 1.3 hour flight. Mr. Andrew Bryan's pilot logbook recorded a 1.1 hour flight and 2 takeoffs and landings for the Private Pilot checkride and was endorsed by Mr. Tomkins.
- Only two landings were recorded by Mr. Andrew Bryan and Mr. Tomkins in Mr. Bryan's logbook. The Private Pilot checkride cannot adequately be completed in 1.2 hour of oral examination and one hour of flying. The oral exam is completed after qualifying the applicant to take the checkride and consists of eight "tasks" with subcomponents within each task that are evaluated. The checkride requires at least three takeoff and landings.

One Hour Checkride

- A typical private pilot checkride may take between four and five hours from start to finish. According to the FAA 2005 Designated Pilot Examiner Survey, 53.7 % of the 540 respondents stated their flight portion for a first time private pilot ASEL practical test is between 1 ½ to 2 hours. The survey also stated that 42.2% of the respondents stated that their ground portion for the first time private pilot ASEL practical test is between 2 to 2 ½ hours.



One Hour Checkride

- Mr. Andrew Bryan received an inadequate FAA checkride that if it was conducted properly, would have likely revealed weaknesses in Mr. Andrew Bryan's aeronautical skills.

Mr. Andrew Bryan's last recorded flight in N8966W was on March 26, 2005, the day before the accident. **The accident occurred on the eighth flight after Mr. Andrew Bryan was issued his Private Pilot certificate.**

Instructor's Record
I have personally instructed the applicant and con...

Date: 12-26-2004
Instructor's Signature: Nathan Howdon
Air Agency's Record

The applicant has successfully completed our _____ test without further _____ test.

Date: _____ Agency Name and Number: _____

Designated Examiner or Airman Certificate

Student Pilot Certificate Issued (Copy attached)
 I have personally reviewed this applicant's pilot logbook and/or training record, and certify that it is in accordance with the requirements of 14 CFR Part 61 for the certificate or rating sought.
 I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate.
 I have personally tested and/or verified this applicant in accordance with pertinent procedures and standards with the result indicated below.

Approved - Temporary Certificate Issued (Original Attached)
 Disapproved - Disapproval Notice Issued (Original Attached)

Location of Test (Facility, City, State): REMMERS AVIATION, Burlington, Iowa

Certificate or Rating for Which Tested: PRIVATE PILOT

Date: 02/10/2005
Examiner's Signature: C.D. Tomkins
Type(s) of Aircraft Used: Piper PA-28-235
Registration No.(s): N 8966 W
Designation No.: 237010
Designation Expires: 10/31/2005

DATE	AIRCRAFT TYPE	AIRCRAFT IDENT	ROUTE OF FLIGHT		NR INST APP	REMARKS AND ENDORSEMENTS	NR TO	NR LOG	AIRCRAFT CATEGORY AND CLASS			CONDITIONS OF FLIGHT			TYPE OF PILOTING TIME				TOTAL DURATION OF FLIGHT								
			FROM	TO					SINGLE ENGINE LAND	MULTI ENGINE LAND	SEMI WINGED ROTOR	NIGHT	ACTUAL INSTRUMENT	SIMULATED INSTRUMENT (ICAO)	FLIGHT SIMULATOR	CROSS COUNTRY	AS FLIGHT INSTRUCTOR	DUAL RECEIVED		PILOT IN COMMAND (INCL. SOLO)							
11/7	PA-28-235	8966W	DUL - HKN	- OLT		no country, no checkride	6	6	2	1			2	1						2	1						
11/8	PA-28-235	8966W	DLZ - ANW - PFD	- OLT		back work, 1st checkride	3	3	2	4				2	4					2	4	2	4				
11/14	PA-28-235	8966W	DLZ - ALG	- IKTU - ALG - OLT		night x-c - Anbury IE 4 hrs, 1st checkride	4	4	3	3				3	3					2	5	8	3	3			
11/18	PA-28-235	8966W	DLZ - BRL	- OLT			2	2	2	3					2	3				2	3	2	3				
11/18	PA-28-235	8966W	DLZ - ALG	- OLT		steep turns, dual seen	4	4	1	4					4	4				1	0	4	1	4			
12/18	PA-28-235	8966W	DLZ - SYR	- OLT			3	3	8													8		8			
12/18	PA-28-235	8966W	DLZ - ALB	- OLT		night approach, steep bank night dual the best	3	3	1	4											1	0	4	1	4		
12/18	PA-28-235	8966W	DLZ - ALG	- OLT		steep turns, emergency steep turns, emergency	7	7	2	4											2	0	4	2	4		
1/18	PA-28-235	8966W	DLZ	- OLT		steep turns, emergency steep turns, emergency	5	5	1	0											1	0		1	0		
1/23	PA-28-235	8966W	ALZ	- OLT		steep turns, emergency steep turns, emergency	1	1	1	0												1	0		1	0	
2/10	PA-28-235	8966W	DLZ	- BRL - OLT		steep turns, emergency steep turns, emergency	2	2	2	0											2	0		2	0		
2/10	PA-28-235	8966W	BRL	- LOCAL		TEST APPROVED	2	2	1	1												1	1	1	1		
2/12	PA-28-235	8966W	DLZ - PRL	- OLT		steep turns, emergency steep turns, emergency	2	2	1	0													1	0	1	0	
I certify that the entries in this log are true.							TOTALS THIS PAGE	44	44	22	2			9	8	1	2			13	1	10	6	11	6	27	4
PILOT SIGNATURE: <i>Clark Remmers</i>							AMT. FORWARDED	148	148	45	1			4	0	1	9			3	9	4	1	4	5	1	
							TOTALS TO DATE	218	218	67	3			13	8	3	1			17	0	51	6	15	7	67	5

One Hour Checkride



- Mr. George Tegeler stated in his deposition what he observed the day he did his walk around after the accident he said, “well, from the turnaround area where the aircraft would have turned around for the takeoff roll there was a very faint black mark leaving that area, and by ‘faint mark’ I mean a mark from a tire that is still rolling but dragging. That mark proceeded out onto the runway, never quite got to a position where the aircraft would have been on the centerline. It would have been the left main of that aircraft.” (Tegeler Deposition pg. 31-32)

One Hour Checkride

- Mr. Tegeler said, “The mark abruptly stopped where the aircraft lifted off. I’m guessing within 20 yards the mark reappeared but very black, being the tire’s locked up now from the aircraft lifting off and the tire stopping. The dark black mark went back to a faint mark as the tire began to roll. That mark then went off into the grass, and the tire again locked in the grass being less traction. At that point there was a runway light knocked down. I don’t recall what position on the aircraft we were thinking that the runway light hit the aircraft, and that mark in the grass continued I’m guessing 20 to 30 yards, where it stopped again where the aircraft lifted off the second time.”

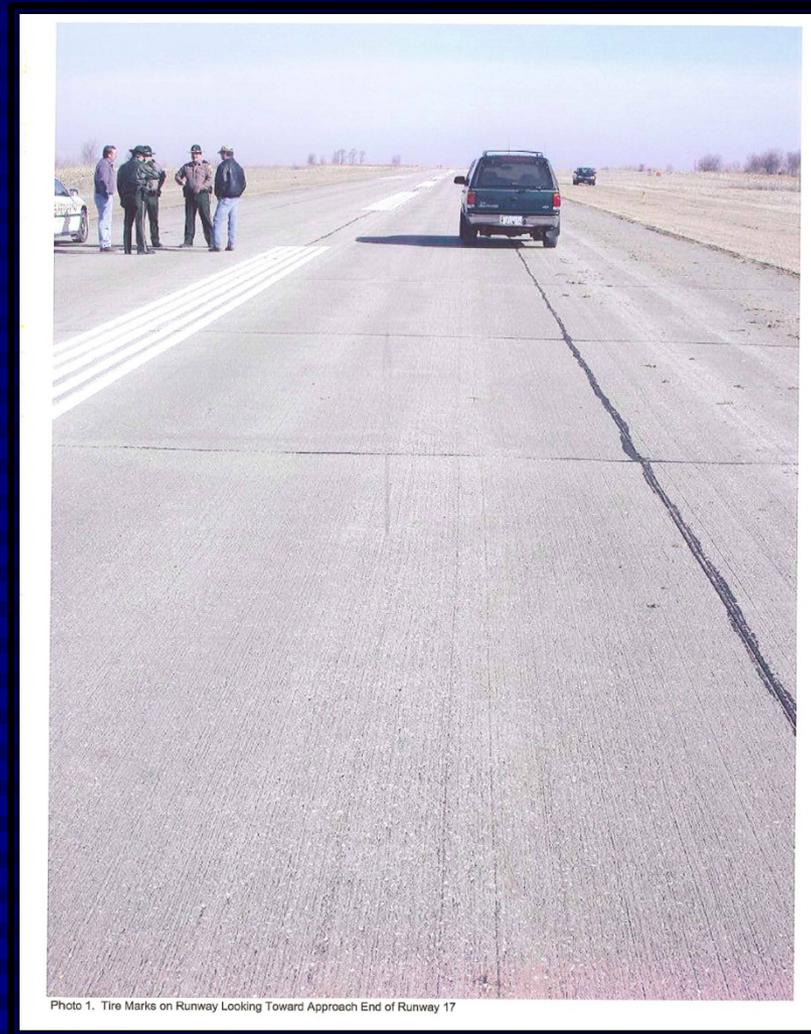


Photo 1. Tire Marks on Runway Looking Toward Approach End of Runway 17

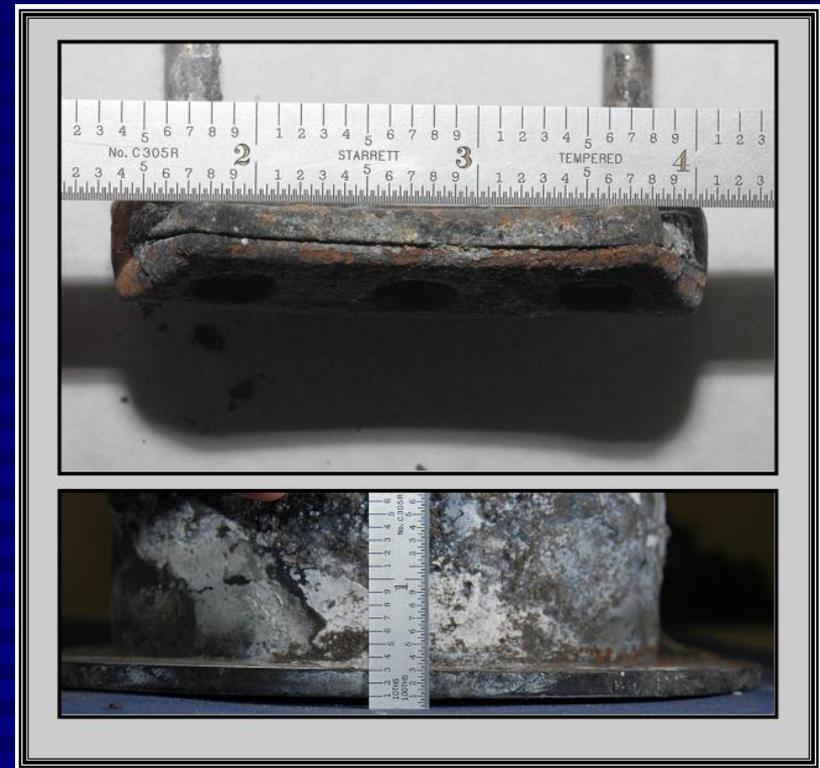
One Hour Checkride

- Post crash examination of the brake system found it to be partially engaged



One Hour Checkride

- In a phone interview on January 6, 2009, Mr. Charles (Chuck) Smith stated that the day prior to the accident he spoke to Andrew Bryan and discussed a problem with the braking system of the airplane. According to Mr. Smith, Andrew, “mentioned something about having a little problem with the brakes on the airplane and then, uh, you know, that he thought his dad had it fixed so...” This is consistent with a pre-existing brake issue and the physical evidence found at the scene.



Another One Hour Checkride

- Aircraft Type/
Registration: Piper PA-32-260, N3331W
- Accident Location:
Venice, FL
- Date of Accident: May
20, 2004



Another One Hour Checkride

- Mr. Ricky Unger completed a Private Pilot checkride on December 16, 2003, with designated pilot examiner Mr. David L. Whitman.
- The checkride consisted of a 1.2hour oral exam and a 1.1 hour flight. Mr. Ricky Unger's pilot logbook recorded a 1.0 hour flight.

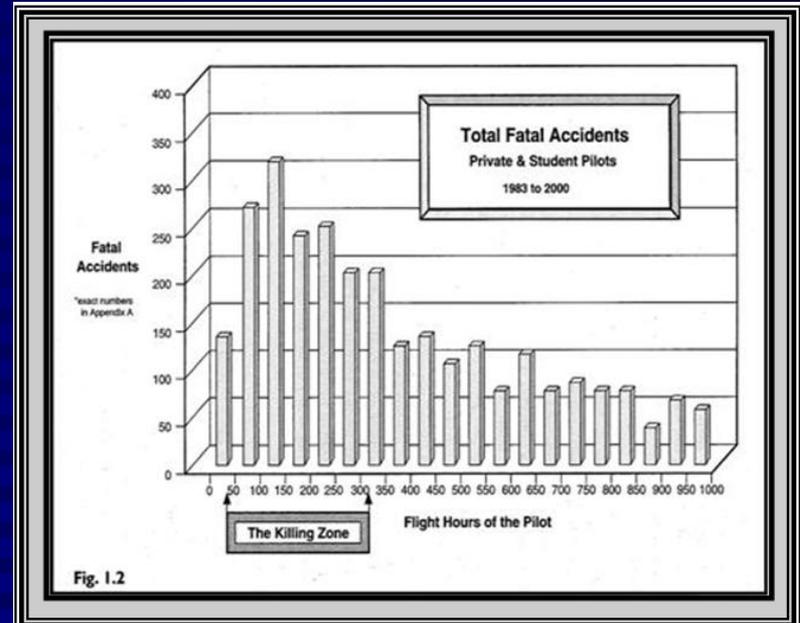
Another One Hour Checkride

DATE	AIRCRAFT TYPE	AIRCRAFT IDENT	ROUTE OF FLIGHT		NRI NEXT APR	REMARKS AND ENDORSEMENTS	NRI LDG	AIRCRAFT CATEGORY		AND CLASS	CONDITIONS OF FLIGHT			TYPE OF PILOTING TIME				TOTAL DURATION OF FLIGHT			
			FROM	TO				SINGLE-ENGINE LAND	MULTI-ENGINE LAND		NIGHT	ACTUAL INSTRUMENT	SIMULATED INSTRUMENT (HOOD)	FLIGHT SIMULATOR	CROSS COUNTRY	AS FLIGHT INSTRUCTOR	DUAL RECEIVED		PILOT IN COMMAND (ENCL. SOLID)		
1/20/03	PA 28	30732	VNC	VNC		RECLINING SEAT - 100% OK	5	13		0.0/0.0		5			13		13				
1/28/03	PA 28	30732	VNC	FTD-VNC		RECLINING SEAT - 100% OK		20		0.0/0.0		8			20		20				
1/28/03	PA 28	30732	VNC	VNC		GROUND REFLECTION - MAX TOU - 4.505	2	07							07		07				
1/31/03	PA 28	30732	VNC	SEF - X06 VNC		Y. CAR'S - 100% OK DEAD ENDORSEMENT	3	24					24		24		24				
1/31/03	PA 28	30732	VNC	VNC		Y. CAR'S - 100% OK DEAD ENDORSEMENT	2	13							13		13				
1/31/03	PA 28	30732	VNC	FTA-VNC		Cross Country		34		0.0/0.0			34		34		34				
2/4/03	PA 28	30732	VNC	VNC		Y. CAR'S - 100% OK DEAD ENDORSEMENT		4		0.0/0.0					4		4				
1/26/03	PA 28	30732	VNC	VNC		Y. CAR'S - 100% OK DEAD ENDORSEMENT	3	10							10		10				
1/16/03	PA 28	30732	VNC	LAC-VNC			2	21					21		21		21				
2/19/03	PA 32-260	3331W	CSG	TWC			1	25					25		25		25				
4/24/03	72-260	3331W	VNC	TWC		Engine check	1	5							5		5				
I certify that the entries in this log are true,							TOTALS THIS PAGE	18	1			13		10	4	11	6	6	18	1	
PILOT SIGNATURE: <i>David L Whitman</i>							AMT. FORWARDED	51	0					20	9	44	1	6	6	51	2
							TOTALS TO DATE	69	1					31	3	55	7	13	1	69	3

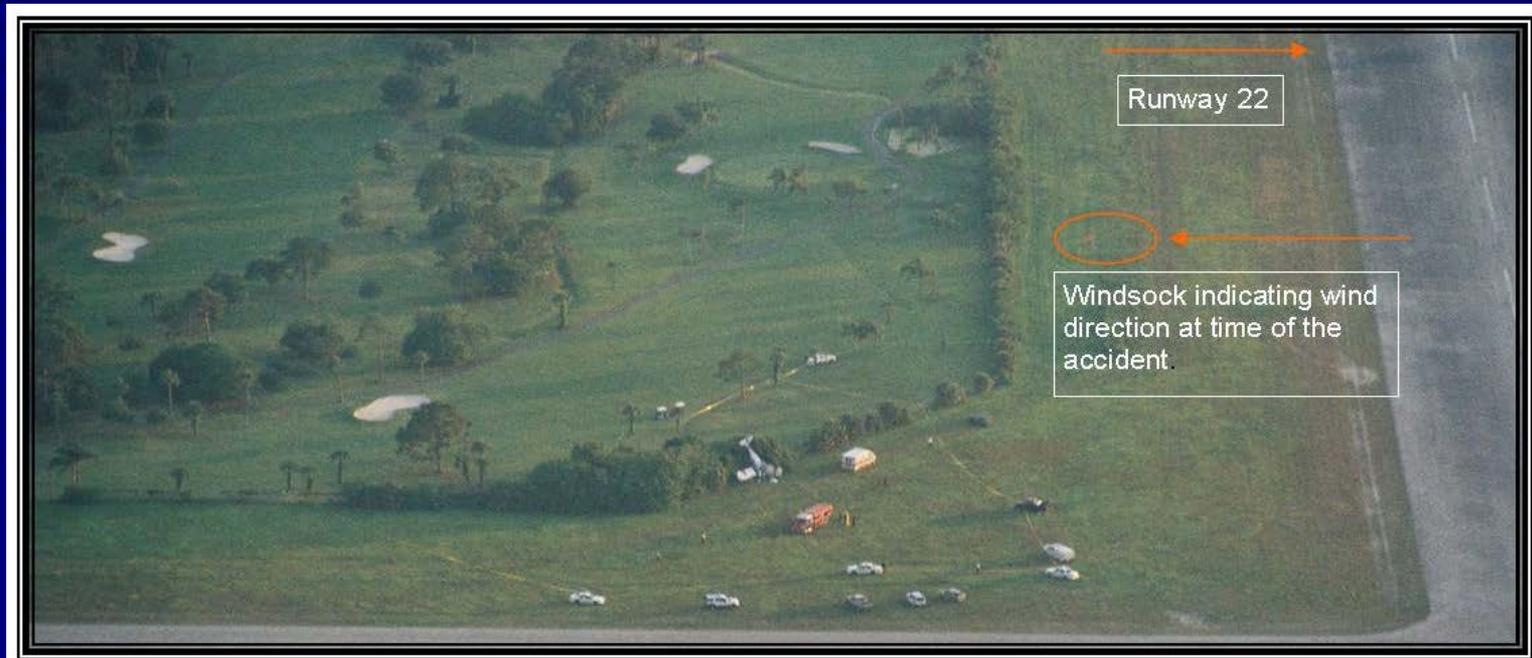
Location of Test (Facility, City, State)		VNC - VENICE, FL		Duration of Test		
		Ground	Simulator/FTD	Flight		
		12	SIM) 0.0 FTD) 0.0	1.) 11 2.) 0.0		
Certificate or Rating for Which Tested			Type(s) of Aircraft Used		Registration No.(s)	
PRIVATE, ASEL, INITIAL			1.) PA-28, 2.)		1.) N30732, 2.)	
Date	Examiner's Signature (Print Name & Sign)		Certificate No.	Designation No.	Designation Expires	
12/16/03	DAVID L WHITMAN <i>David L Whitman</i>		1505793	SO35-1012	4/30/04	

Another One Hour Checkride

- Mr. Unger received his training in a PA-28, a smaller aircraft than the PA-32, with a smaller engine and less power. According to Mr. Unger's pilot logbook he had a total of 66.1 of his 86.9 hours in a PA-28.
- According to Mr. Unger's pilot logbook, Mr. Unger logged only three hours of dual flight instruction in PA-32-260, N3331W, after purchasing the aircraft.



Another One Hour Checkride



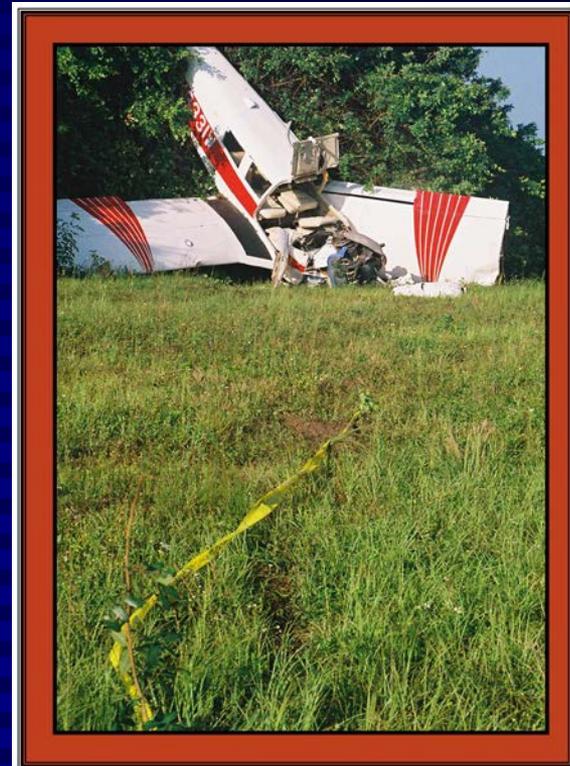
Another One Hour Checkride

- Mrs. Kathleen Unger McCarty, wife of the accident pilot, stated in an interview with the NTSB that her husband was doing touch and go landings to Runway 22. She stated further that the airplane never touched the ground that it lifted up to about the height of a 2 ½ story building and then the right wing rose up and the left wing dropped. At that point she stopped watching the airplane and ran to call for help



Another One Hour Checkride

- Mr. Hardoon stated that he only observed the plane for about 10 seconds from his first sight of it and that his distance from the accident airplane was, “no more than half a mile at any given time.”



Give ALL of the Training

Cirrus SR-22 /
N9523P

near Hill City,
Minnesota

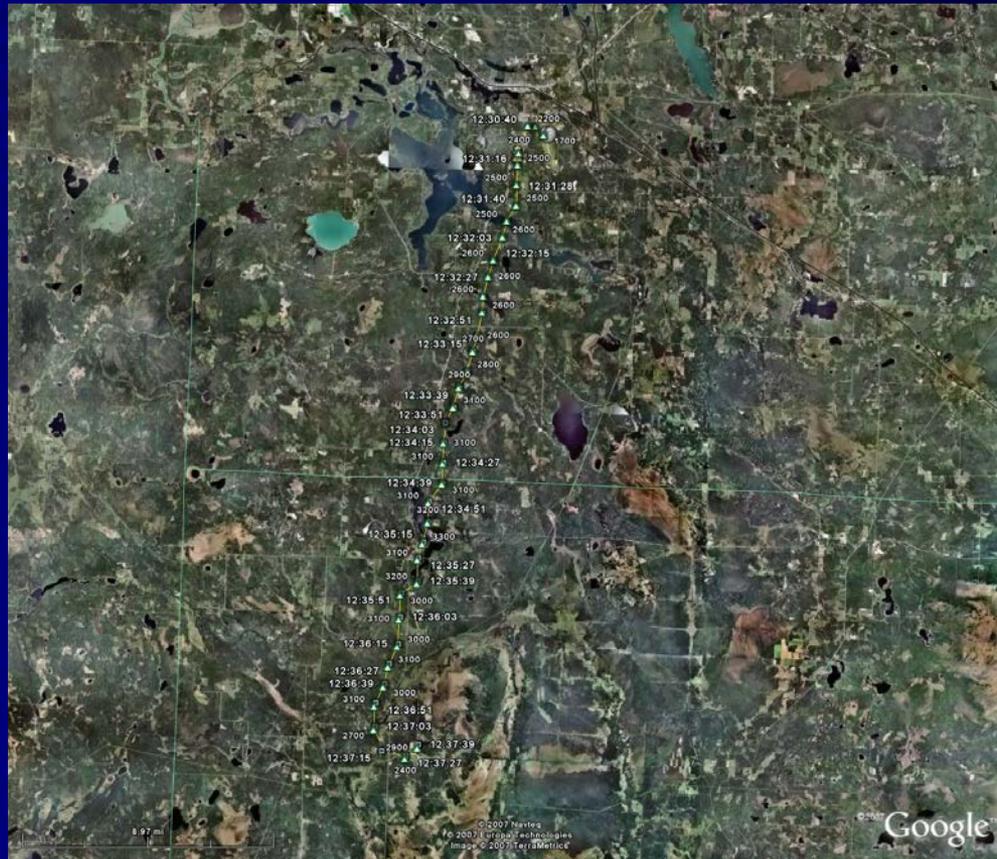
18 January 2003



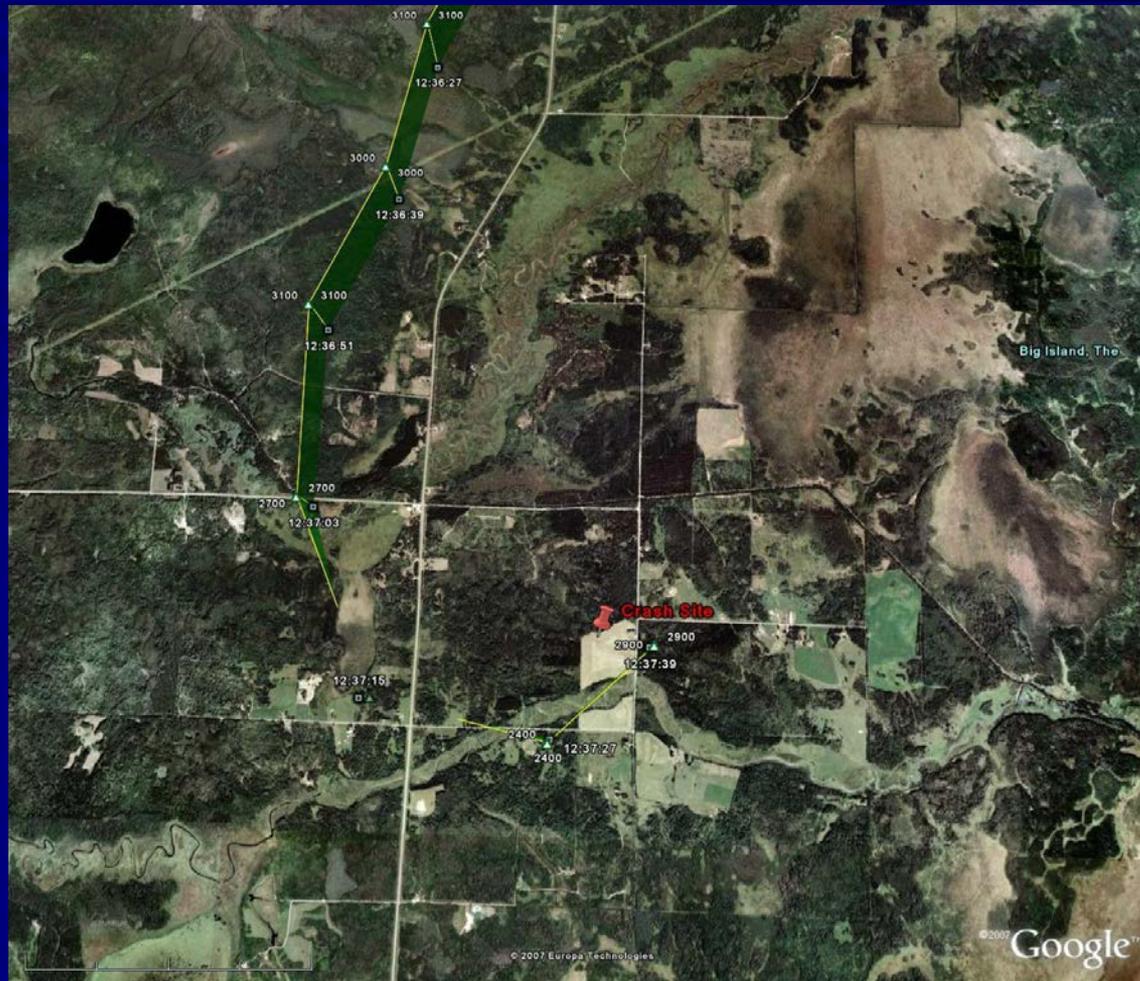
Give ALL of the Training

- At approximately 0638 (CST), on Saturday, 18 January 2003, a Cirrus SR-22 call sign N9523P impacted terrain near Hill City, Minnesota approximately 20 miles southwest of Grand Rapids /Itasca County airport. The pilot and one passenger were killed in the collision. (NTSB Report page 1)
- The purpose of the trip was, to transport Mr. Prokop and Mr. Glorvigen from Grand Rapids, Minnesota airport to the St. Cloud, Minnesota Regional airport. (NTSB report page 1)
- Mr. Prokop received two weather briefings from Princeton AFSS – the first at 0455 local and the second at 0541 local. **Neither briefer advised “VFR flight not recommended” in spite of an AIRMET for IFR conditions and marginal VMC weather along the route of flight.**

Give ALL of the Training



Give ALL of the Training



Give ALL of the Training

- Mr. Gary Prokop was the pilot in command and was qualified in the Cirrus SR-22 aircraft. Mr. Prokop held a Private Pilot certificate and had 18.9 hours in the Cirrus SR-22 aircraft. Although not required by regulations, Mr. Prokop completed Cirrus transition training on 12 December 2002. Mr. Prokop had 248 total flight hours.

Give ALL of the Training

- Mr. Prokop had 47.6 hours of simulated instrument flight training that began on February 27, 2002 and continued up to the day before the accident. as well as 1.1 hours of actual instrument flight training including .3 hours in a Cirrus SR-22 in instrument weather conditions on 12/16/2002.
- Mr. Prokop was night current in accordance with 14 CFR 61.57. He completed night landings on 11/19/02, 1/2/03, and 1/12/03.
- Mr. Prokop's most recent flight training was conducted on 17 January 2003 by Mr. Steve Day, a Certificated Flight Instructor (Instruments) in a Cessna 172 aircraft and included 1.1 hours of instrument training in preparation for an instrument check ride scheduled the following week. (Prokop logbook/ Day interview)

Give ALL of the Training

DATE	AIRCRAFT TYPE	AIRCRAFT IDENT	ROUTE OF FLIGHT		NR INST. APP.	REMARKS AND ENDORSEMENTS	NR TID	NR LDG	AIRCRAFT (SINGLE-ENGINE LAND)	CONDITIONS OF FLIGHT			TYPE OF PILOTING TIME				TOTAL DURATION OF FLIGHT
			FROM	TO						NIGHT	ACTUAL INSTRUMENT	SIMULATED INSTRUMENT (WOOD)	FLIGHT SIMULATOR	CROSS COUNTRY	AS FLIGHT INSTRUCTOR	DUAL RECEIVED	
4/17	A1C40	76125	GPZ	GPZ		UNK. Holdings & Entry procedures			10						10	10	10
4/20	C172	35322	GPZ	GPZ		1-VRZ 34 GPZ full approach 2-TLS 34 GPZ (K. CRO)			12						12	12	12
4/21	C172	35322	GPZ	GPZ		2-VRZ 34 GPZ full app 2-TLS 34 GPZ (K. CRO)			12						12	12	12
4/24	C172	35322	GPZ	GPZ		3-VRZ 34 GPZ (K. CRO) 7-VRZ 34 GPZ (K. CRO)			12						12	12	12
4/26	C172	35322	GPZ	GPZ		4-VRZ 34 GPZ (K. CRO) 2-VRZ 34 GPZ (K. CRO)			16						16	16	16
4/27	C172	35322	GPZ	BRD		Tim & Sean look at car			8						8	8	8
4/27	C172	35322	BRD	GPZ		Return - plane			8						8	8	8
4/28	C172	35322	GPZ-H6	GPZ		3-VRZ 34 GPZ (K. CRO) 2-VRZ 34 GPZ (K. CRO)			20						20	20	20
4/29	C172	35322	GPZ-DH	DCH		New over to watch Grant			8						8	8	8
4/30	C172	35322	DCH	GPZ		Play hockey			9						9	9	9
5/1	C172	35322	GPZ	FCM		Hazelton GLE (Tim)			21				21		21	21	21
5/1	C172	35322	FCM	GPZ		From Hazelton (Tim)			17						17	17	17
5/3	C172	35322	GPZ	GPZ		partial dual Holdings and VRZ 1-VRZ 34 GPZ (K. CRO)			12						12	12	12
I certify that the entries in this log are true,						TOTALS THIS PAGE			165						94	165	165
Pilot Signature: <i>Henry Parkes</i>						AMT. FORWARDED			1302						693	654	1302
						TOTALS TO DATE			1467						787	819	1467

Give ALL of the Training

- Mr. Prokop completed Ground Lesson 4a VFR into IMC Procedures SR-22 on 12 December 2002 with UNDAF Instructor Mr. Shipek.

Ground 4a: VFR into IMC Procedures SR20/22
Est. 1.0 – 1.5 hrs.

Brief on VFR into IMC Procedures completed
 Ground Lesson completed

<u>Ground Briefing</u> Customer N: <u>9523P</u>	Activity Date: <u>12 Dec 02</u>
Inst ID Code: <u>SHIP</u>	Actual Hrs: <u>2.0</u>

INSTRUCTOR NOTES:

Give ALL of the Training

- AIRMETs for IFR conditions and turbulence were in effect at the time of the weather briefing. (NTSB Factual Report 1b).
- AIRMET Sierra was issued at 0245 for occasional ceilings below 1,000 feet AGL and/or visibilities below 3 statute miles in light snow showers and blowing snow. IFR conditions along the GPZ-STC route of flight were expected to continue beyond 0900, ending around 1200.
- AIRMET Tango was issued at 0245 for occasional moderate turbulence below 8,000 feet MSL and forecast to exist through 1500.

Give ALL of the Training

- 1144:32 PF11 so you'll be paralleling it just off to the side of it just be aware that it's out there and then the airmet for i f r uhm covers pretty much the entire state right now but ah let me take a look along the route of flight see if there is any actual i f r now you got some marginal at ah at grand rapids ahm **but ah at ah at aitkin it gets ah marginal with visibility they were down to three now they're up a little bit more ahm with light snow so in areas of snow you might ah visibilities may (unintelligible) may be down to three** that's the lowest visibility I see in s in the light snow most of the snow has moved to the east ah aitkin now is up to (unintelligible) new report just came in they're up to seven mile visibility with ceilings three thousand two hundred overcast some lower scattered layers below that
- 1145:30 N9523P okay well good that's improving a little bit ha
- 1145:33 PF11 ya and over in the maple lake area um ceilings are eighteen hundred broken but visibilities look pretty good so thee ah the only problem you may have along the route that I can see is ah marginal ceilings

Give ALL of the Training

- Although, IMHO this was not a causal factor in this accident---Mr. Prokop did not complete Flight Lesson 4a VFR into IMC Procedures in December 2002 with Mr. Shipek although Mr. Shipek testified he did. The lesson is not recorded in the logbook.

Flight 4a: **IFR Flight (non-rated)** Est. 1.0 – 2.0 Hrs. Actual: ____ hrs.

Skipped items should be left unchecked.

U M S E		
-----	Preflight procedures	BEFORE
-----	Engine start-up	TAKEOFF
-----	Avionics set-up	
-----	Taxi procedures	
-----	Before-takeoff checks	
-----	Normal &/or crosswind takeoffs	FLIGHT
-----	Climb-out/Cruise procedures	MANEUVERS
-----	Basic attitude instrument flight	
-----	Recovery from unusual attitudes	
-----	Recovery from VFR into IMC (auto-pilot assisted)	
-----	Sample instrument approach (optional)	
-----	Normal & crosswind landings	
-----	Aircraft shutdown procedures	AFTER
-----	Aircraft securing procedures	LANDING

Flight Information

Customer N: _____ Activity Date: _____

Hobbs End: _____ Hobbs Begin: _____

Inst ID Code: _____ Actual Hrs: _____

Landings Day/night: _____ Instrument Approaches: _____

Give ALL of the Training

Jury Finds Against Cirrus, UND In Initial \$16.4 M Judgment

Company Found Partly Liable In 2003 Accident

A jury in Itaska County Minnesota has found Cirrus Aircraft Corporation and The University of North Dakota to be at fault in the 2003 crash of a Cirrus SR-22 that left two people dead. News reports do not quantify how many of these jurors were conversant with the FARs or the basic tenets/hazards/conduct of VFR/IFR flight operations.

Minnesota Public Radio reports that the jury found that Cirrus and the University of North Dakota's Aerospace Foundation were negligent in failing to adequately train the pilot, Gary Prokop on how to fly the plane under IFR conditions. Attorney Phil Sieff, who represented the family of James Kosak, a passenger in the plane, said Cirrus and UND did not provide risk management training in-type.

"We contended very clearly that Mr. Prokop purchased and was promised training, and it wasn't provided to him," said Seiff. "The failure of that training directly led to the plane crash, and the jury agreed."

The jury found Prokop to be 25 percent negligent in the accident, while it said Cirrus and UND bore 75 percent of the responsibility. Prokop's family was awarded \$9 million, while Kosak's family received a judgment of \$7.4 million.

INSTRUCTOR'S SURVIVAL GUIDE

Rule #1: Look out
for #1

- “Everyone is trying to kill you,”
VT-10, Navy Flight School, Naval Air Station
Pensacola, 1977



TO THE OTHER GUY -- YOU'RE THE OTHER GUY

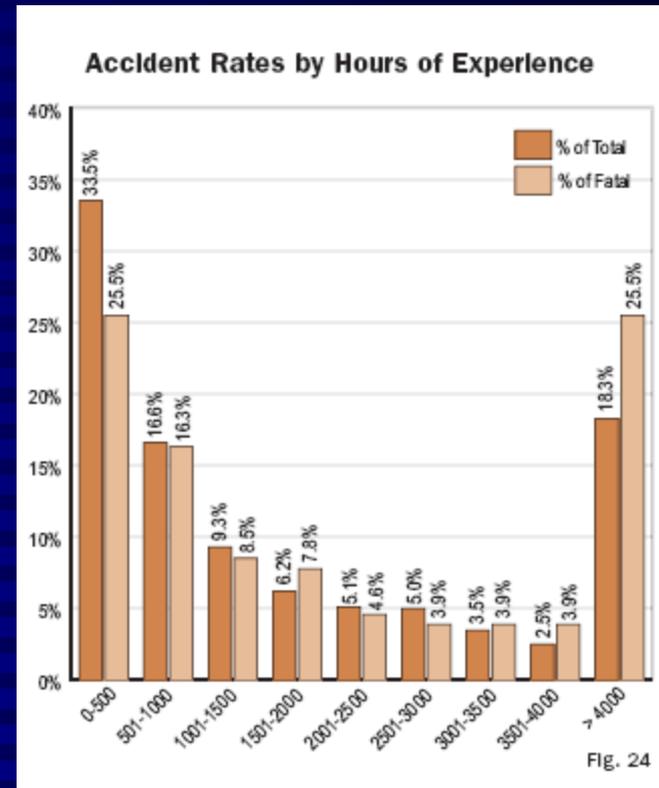


CFI'S SURVIVAL GUIDE

- Teach the way you fly...Fly the way you teach
- Impart knowledge and experience
- Exceed minimum standards
- Set great examples
- Use endorsements to your advantage
- Keep good records
- Abide by regulatory and advisory material
- Remember, how will it read in the newspaper?
- Partner with an experienced mentor instructor

Experience Counts

- Teach what you know!
- Don't jump into an aircraft to teach in something that you have no experience flying.



SUMMARY

- SAFE FLYING IS A MATTER OF MANAGING RISK
- TEACH IT WELL
- Do No Harm!!

