



## ***2013 ANNUAL REPORT***

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Revised 1 January 2014



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### **1. AvSport Reorganizes as LLC**

Prof. H. Paul Shuch, Chief Flight Instructor at AvSport of Lock Haven, has announced that the Sport Aviation business he established four years ago on the Piper Memorial Airport has just been reorganized as a Limited Liability Company (LLC). Shuch explains that the move, intended to protect himself and his family in litigious times, was motivated by the legal fallout of an aviation accident in Oregon last September.

In that case, still under investigation by the National Transportation Safety Board, a pilot personally known to Shuch was flying to California in a Light Sport aircraft somewhat similar to the one AvSport uses for pilot training. Suspecting he was low on fuel, that pilot opted to make a precautionary landing at a private airport. Checking his fuel tanks, he found his fuel level to be indeed below FAA minimum requirements for continued flight. Nevertheless, rather than hauling a five gallon can from a nearby gas station, the pilot opted to fly on to an airport just a few miles away, to take on additional fuel.

His aircraft ended up running out of fuel on that flight, and the pilot attempted an emergency landing in a field just short of the runway. "I *thought* I had enough fuel to make it," he later reported. Thankfully, the pilot was not injured, though his aircraft sustained substantial damage.

But the story neither begins nor ends here. Over the preceding year, in his capacity as volunteer FAA Safety Team Lead Representative for Lock Haven, Shuch had counseled this particular pilot several times about possible unsafe actions and decisions he had witnessed. So, it turns out, had two other Certified Flight Instructors. The pilot had disregarded their words of caution.

After the accident, the pilot, who happens to be an attorney, filed a multi-million dollar lawsuit against the manufacturer of his aircraft, as well as its importer, US distributor, the dealer who sold it to him, the mechanic who maintained it, and the flight instructors who had trained him. That lawsuit, according to Shuch, is completely without merit. Nevertheless, it will cost each of the defendants tens to hundreds of thousand dollars in legal defense fees.

"The only people who benefit from such a situation are the attorneys," states Shuch. "No matter how much insurance you carry, someone can always sue you for more than that amount. And, the facts in a case may have little bearing on the decision of a jury."

Shuch reasoned that, as a Sole Proprietorship, AvSport could well have been the target of just such a frivolous lawsuit, and his personal property and retirement income could have been placed in jeopardy. Registering his flight school as an LLC, he realized, would provide at least a modicum of protection.

Now, should someone choose to sue the company, all he or she can hope to gain is ownership of a flight school. "Frankly," Shuch adds immodestly, "without someone like me at the helm, AvSport has very limited commercial value."



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### **2. Vision and Mission Statements**

#### **Our Vision:**

**AvSport envisions a General Aviation renaissance, facilitated by quality training of Sport Pilots and the availability of modern Light Sport Aircraft.**

#### **Our Mission:**

**AvSport enhances aviation safety and enjoyment, by offering:**

-  a rigorous, though flexible, flight training curriculum
-  experienced, professional Certified Flight Instructors
-  well maintained advanced Light Sport Aircraft
-  modern and accessible instructional materials
-  individualized instruction
-  an affordable aviation experience

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### 3. Announcing AvSport's Flight Simulator Club



Gaining and maintaining pilot proficiency requires consistent flying and frequent practice. Airlines and the military have long recognized that flight simulators play an important role in both the acquisition and retention of flying skills. Unfortunately, the FAA-certified full-motion training devices they employ are priced on a par with the average Light Sport airplane -- well beyond the resources of AvSport, or most other small flight schools.

At the other end of the spectrum, many pilots have found flight simulation video games on a personal computer useful in reviewing procedures, and maintaining a semblance of flight currency when the weather isn't fit for flying. Free-flight mode on such a device allows you to punch holes in the sky and enjoy some of the pleasurable aspects of flight, without burning any avgas. But, without structured curriculum and scenario-based training tools, flying a personal computer is of questionable educational value.

AvSport has embraced a middle ground, thanks to the introduction of AOPA's Jay flight simulator by Redbird. The Jay is definitely *not* an FAA approved training device, which means it can't be used for logging hours or approaches toward a rating, or for meeting legal currency requirements. It is, however, a scenario-based training system which allows the student (or the licensed pilot, or the prospective flyer) to test his or her skills in a variety of aircraft, flying a variety of routes, under varying weather conditions, with the machine providing constant visual, tactile, and verbal feedback. In other words, the Jay is the ideal electronic combination of aircraft, airspace, and flight instructor. And, although hours spent flying the Jay don't count toward your license<sup>\*</sup>, they promise to reduce in-aircraft training time by helping you to gain proficiency in the tasks you find most challenging. After all, it isn't hours in the logbook, but rather skill with the stick, that really counts.

AvSport makes our Jay simulator available to all of our enrolled primary students, free of charge. For graduates and local pilots, our exclusive Simulator Club membership offers unlimited simulator use, first come, first served, for a flat \$120 in annual dues.

<sup>\*</sup> **Disclaimer:** The JAY is not approved or certified by the FAA or any other foreign government or entity for use in flight training to satisfy required proficiency time, instrument experience, training for certificates or ratings. The use of the JAY for the foregoing purposes is not approved and should not be so used.

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### **4. Facilities**



The General Aviation Terminal, located in Hangar One at the Piper Memorial Airport (KLHV) in scenic Central PA, houses our flight school office, restrooms, conference room, weather briefing room, flight simulator, and pilot's lounge. Ideally suited to Sport Pilot training, Lock Haven is a non-towered general aviation airport with a 3800 by 75 foot paved runway, and a parallel 2200 by 100 foot turf strip. The paved runway is equipped with pilot controlled lighting for night operations, as well as runway end identifier lights and a two-light visual approach slope indicator at each end. A camping trailer on the field is available for the use of students from outside the local area wishing to stay overnight. A nearby B&B also offers visitors pleasant accommodations.



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### 5. Aircraft

Available for both flight instruction and rental by qualified pilots, AvSport of Lock Haven provides modern, well equipped Light Sport aircraft, manufactured to exacting ASTM International standards. Our Evektor SportStar Max primary trainer, manufactured in the Czech Republic, is licensed by the Federal Aviation Administration as a Special Light Sport Aircraft (S-LSA), and equipped with the latest “glass cockpit” electronic flight instruments. Its avionics package makes this aircraft suitable not just for Sport Pilot training, but for more advanced students, including Private and Instrument Pilot candidates. During 2013, AvSport increased safety and reliability, by replacing the engine driven fuel pump and fuel pressure sensor with a new design, and engineering factory-approved modifications to the oil pressure sensor and coolant hoses. We anticipate these changes will extend reliable engine life to the factory-authorized maximum of 2000 flight hours.





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### **6. Curriculum**

Developed by a retired college professor with four decades of experience in higher education, AvSport's rigorous though flexible flight training curriculum allows students to obtain the new Sport Pilot license in half the time, and at half the cost, of the traditional Private Pilot rating, without compromising skills or safety. Students can choose between an accelerated five-week training program, and a less intensive program of conveniently scheduled lessons. We are an FAR Part 61 flight school and TSA-approved Alien Flight Student Program provider, nominated by our students for the AOPA Flight Training Excellence Award. Flight training and individualized ground instruction are integrated, and are supplemented by reading assignments, practice tests, and online PowerPoint lessons to allow each student to progress at his or her own pace.

To date, 89% of AvSport's students accomplishing their first solo flight have gone on to become licensed pilots, and 25% of our Sport Pilot graduates have continued their studies, earning their Private Pilot ratings.

#### **AvSport's standard training packages now include:**

- ✦ "Taste of Freedom," a half-hour Discovery Flight
- ✦ "Gateway to the Sky," a one hour Introductory Lesson
- ✦ "Flight FUNdamentals," a new, four-lesson, minimal-commitment sport flying experience
- ✦ "Five Weeks, Rain or Shine," an intensive pre-solo module
- ✦ "Five More Weeks of Heaven," an intensive post-solo module
- ✦ "Airspace Ace." Get all 3 Sport Pilot controlled airspace endorsements in just 5 days
- ✦ "Pilot Downsizer," a 3-day Light Sport transition course for licensed pilots
- ✦ "The Next Step Up," a 5-week Private Pilot add-on module for Sport Pilots

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### **7. Students**

In 2013, AvSport flight instructors conducted twelve Discovery Flights and fourteen Introductory Lessons, helped two Private Pilots transition to Light Sport Aircraft, saw two Sport Pilots successfully upgrade to Private Pilot, and gave three licensed pilots their 24-month flight review. Our students, who range in age from 16 to 80, have come to Lock Haven for training from as far away as New York, Maryland, Massachusetts, Georgia, California, Canada, Denmark, and Sweden. They represent a wide range of professional and educational backgrounds.

As students graduate from our Sport Pilot training program, many have chosen to become renter pilots, who continue to enjoy the recreational use of our aircraft. Others have continued on to earn higher ratings, and exercise additional pilot privileges.

AvSport promotes a sense of community among our students, instructors, prospects, and graduates, by sponsoring Safety Seminars and graduation parties, as well as hosting movie nights complete with popcorn and aviation films, and monthly Hangar Flying sessions featuring coffee, donuts, education, singing, conversation, and fellowship. Though run as a viable business entity, AvSport strives to foster an old-time flying club atmosphere.



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### **8. Staff**

Early in 2013 AvSport conducted its annual TSA-mandated Security Awareness Training course for five local flight instructors. AvSport remains a TSA-approved Alien Flight Student Provider, subject to annual audits conducted by both the Department of Homeland Security and the Pennsylvania Department of Transportation's division of aeronautics. In his capacity as the volunteer FAA Safety Team Lead Representative for Lock Haven, in 2013 our Chief Flight Instructor offered free safety seminars in Lock Haven PA and Sebring FL, and nationwide through his EAA Webinar series. Last year he provided LSA transition training to two additional flight instructors. Overall, our small staff boasts over 100 years of combined aviation experience.

### **9. Events**



The premiere aviation event at Piper Memorial Airport is the annual Sentimental Journey to Cub Haven fly-in. Each summer, AvSport participates by providing Discovery Flights, safety seminars, and aircraft for static display. Here, our SportStar trainer attracts the attention of some of our neighbors.

In cooperation with airport management and the Sentimental Journey team, AvSport continues as a regular participant in the Experimental Aircraft Association's annual International Learn to Fly Day. During the 2013 event, we conducted an FAA Wings safety seminar, and coordinated a fly-in/LSA display, complete with refreshments and discovery flights.



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### 10. Maintenance

AvSport's modern, fully equipped maintenance shop, located in T-hangar 9 North at Piper Memorial Airport, continues to expand, allowing us to perform condition inspections, preventive maintenance, major and minor repairs, and alterations to our own fleet, as well as customers' Light Sport Aircraft. We remain a factory authorized Rotax Engine service facility. In 2013, our Director of Maintenance added a Powered Parachute rating to his Airplane, Glider, Weight Shift, and Rotax Heavy Maintenance credentials.



AvSport parts inventory



AvSport machine shop



Prof. Shuch inspecting a Powered parachute...



and overhauling a Rotax 912 cylinder head

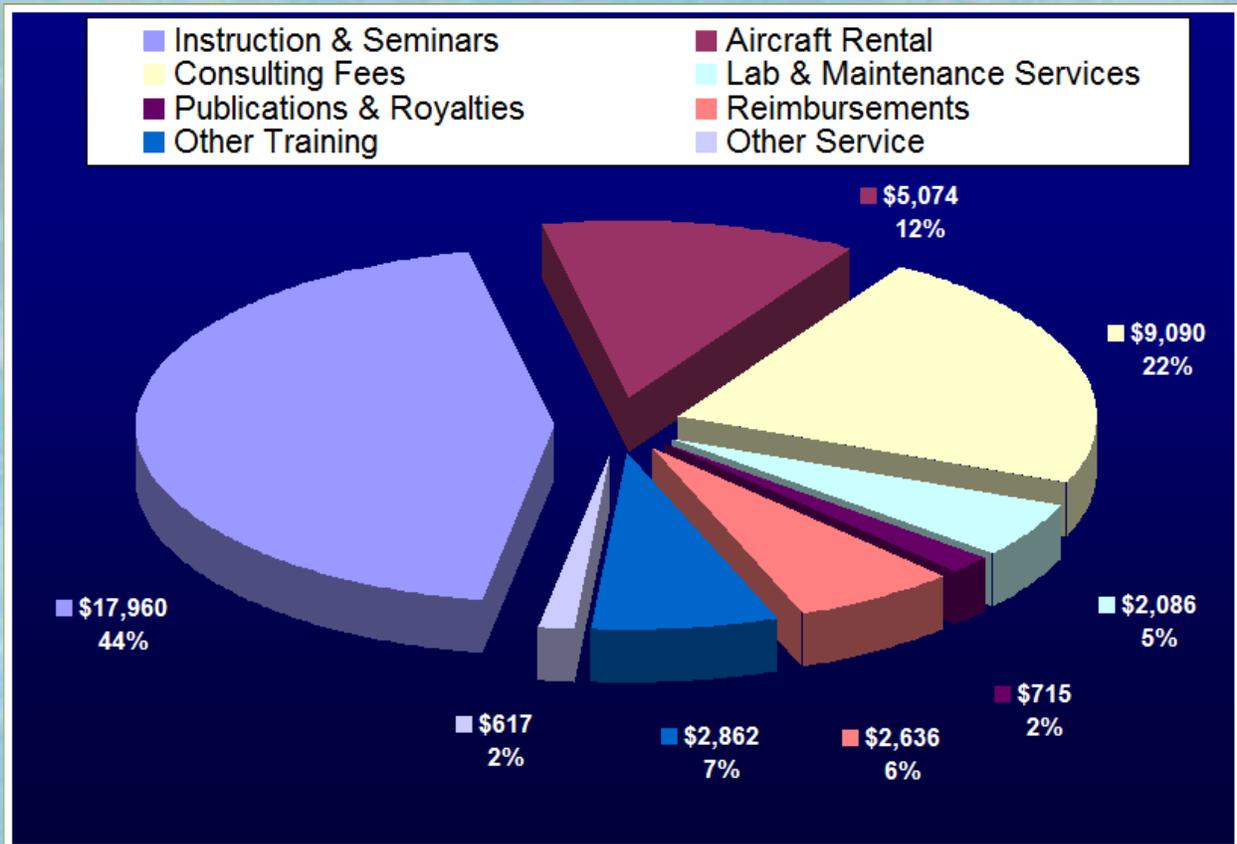


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### 11. Financials

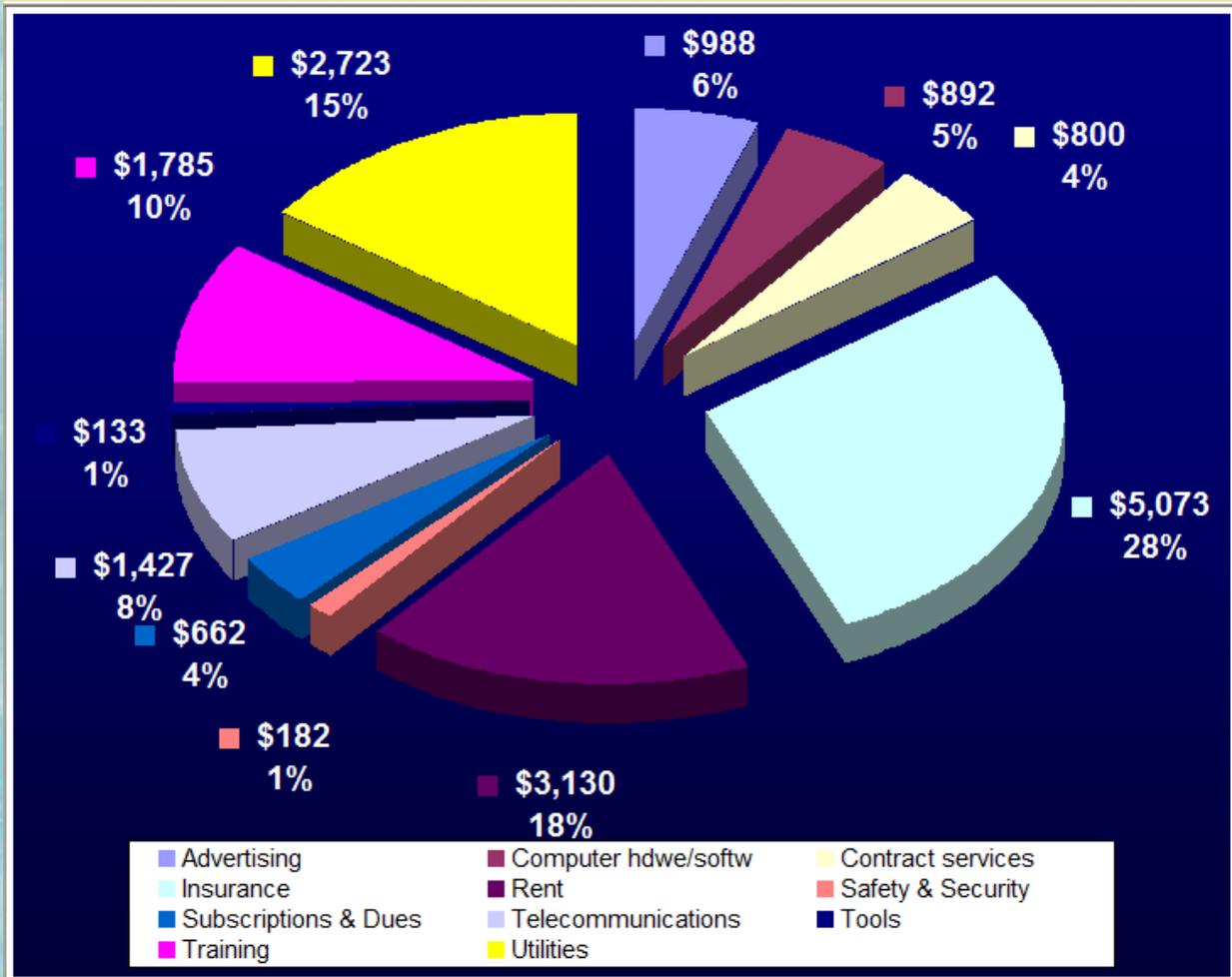
Sport flying being a recreational activity, AvSport’s financial position is both highly seasonal, and dependent upon the local community’s aggregate discretionary income. Due to the condition of the local economy, our 2013 revenues decreased slightly, as compared to the previous year. However, this has been partially offset by a similar reduction in expenses, due primarily to a reduction in aircraft operating costs facilitated by our own maintenance department. AvSport continues to generate a modest positive return on investment, although profits are down slightly from 2012. The charts below detail our operating revenues and expenses for the year just ended, exclusive of amortization of capital investment.

### 2013 Revenues



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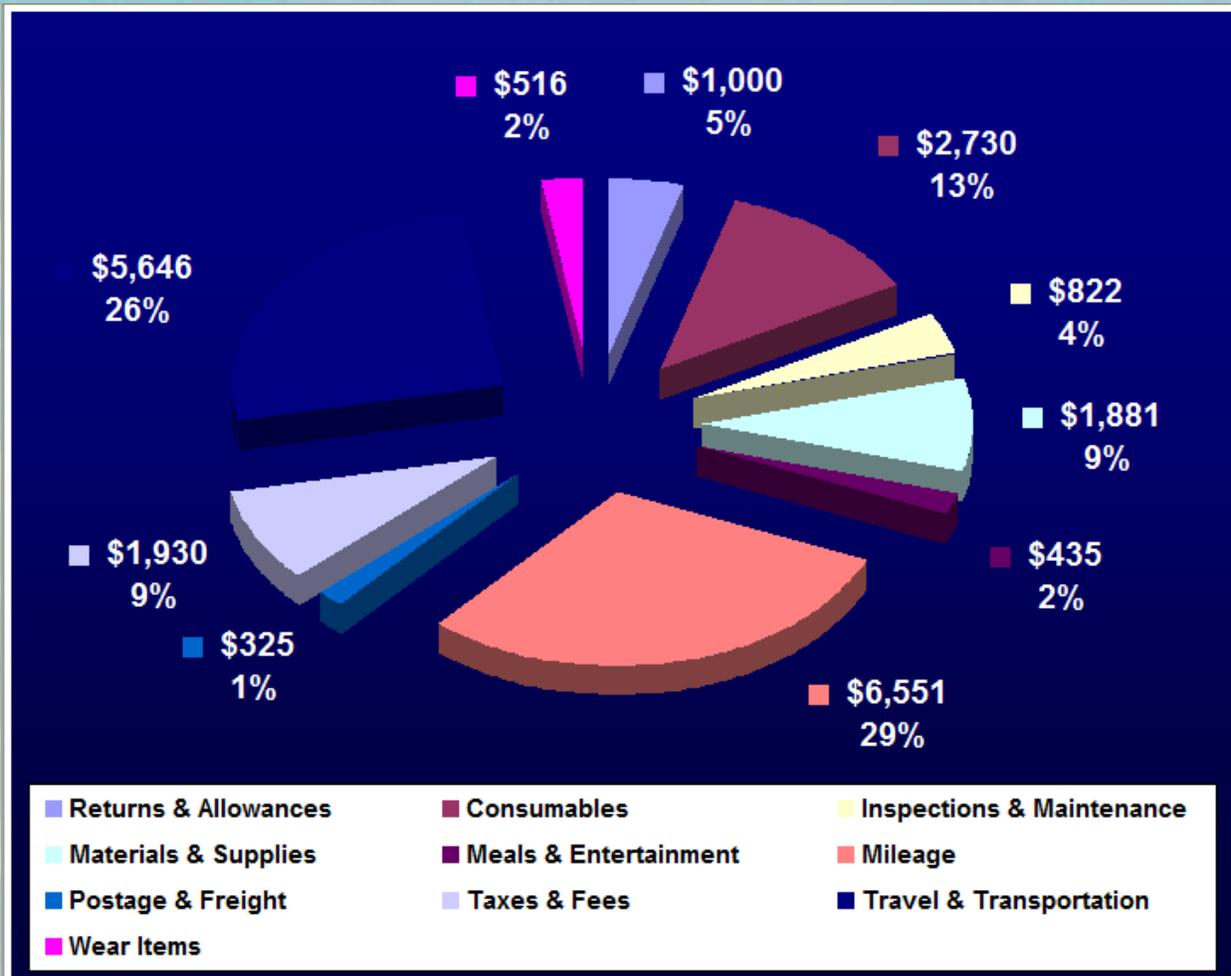
### 2013 Fixed Expenses





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### 2013 Variable Expenses



### Return on Investment

REVENUES:	2010	2011	2012	2013	EXPENSES:	2010	2011	2012	2013
Training	45,871	21,562	29,687	20,821	Fixed	27,379	18,738	20,835	17,774
Services	17,843	15,252	22,863	20,218	Variable	30,087	23,897	29,985	21,835
<b>Total</b>	<b>63,714</b>	<b>36,815</b>	<b>52,551</b>	<b>41,040</b>	<b>Total</b>	<b>57,466</b>	<b>42,635</b>	<b>50,820</b>	<b>39,610</b>
<b>Total Profit (Loss):</b>						6,248	(5,820)	1,730	1,430

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### **12. Awards**

In his capacity as FAA Safety Team Lead Representative for Lock Haven, AvSport chief flight instructor Prof. H. Paul Shuch had the honor of presenting the FAA Wright Brothers Master Pilot Award to Paul Everly. This award recognizes fifty years of contributions to aviation safety.

Everly served for many years as a flight test engineer for Piper Aircraft in Lock Haven. Here, Prof. Shuch pins the Master Pilot wings on Everly, at the 2013 Sentimental Journey to Cub Haven fly-in banquet.



Taffy Lobes photo

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### 13. Congratulations!



AvSport students, instructors, and graduates gathered in the Pilot's Lounge last September, to celebrate with Sport Pilot graduates John and Keith (front center, with forks) the successful completion of their Private Pilot checkrides. Because of our integrated curriculum design, all Sport Pilot training received at AvSport counts toward higher levels of pilot certification. Thus, John and Keith were able to add Private Pilot privileges at modest cost, with minimal additional training hours. Their experience validates the Sport Pilot license as a practical portal of entry into General Aviation, for those desiring to pursue higher pilot ratings and privileges. The cake is inscribed "Congratulations Private Pilots John and Keith."

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### **14. In Memoriam**

#### **Remembering Elaine and Tom Huff**

AvSport is saddened to report that we lost our friends Tom and Elaine Huf on Labor Day, 2013, when their 1944 Cessna T-50 Bobcat went down in a thunderstorm near PS50, their home strip in Harford Township. The Hufs were familiar faces at Lock Haven's annual Sentimental Journey fly-in, where they frequently displayed their "Bamboo Bomber", Elaine's pink 1947 Aeronca L-16A, or their 1941 Stinson 10A.



In addition to those beautiful antique airplanes, Tom and Elaine also flew gliders and seaplanes. They were on their way home to Kingsley, PA from Blakesburg, IA, where they had just attended an Antique Aircraft Association gathering, when the accident occurred.



Perhaps the most exotic (and certainly the most recognizable) of the Huf's planes is the experimental "Yellow Rat," which Tom built 40 years ago, and brought to Sentimental Journey every year. Here, they are seen together at our July, 2013 fly-in.



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### ***In Memoriam:***

### **Remembering Dennis Hoffman**

**22 November 1946 - 20 April 2013**



Aircraft mechanic **Dennis E. Hoffman** of Mill Hall, PA earned a certificate in Airframe and Engine maintenance at the Williamsport Area Community College (now the Pennsylvania College of Technology), studied jet engine maintenance at Spartan School of Aeronautics in Tulsa, OK, and attended many manufacturer schools, including Rolls Royce, Pratt & Whitney, General Electric, CFM, Napier, Airbus, BAC, Boeing, Convair, Fokker, McDonald Douglas, and Nord. Some of the aircraft that he was certified to repair, inspect, run-up, and taxi include Convair 240, 440, 580, BAC 111, Nord 262, Mohawk M-298, Fokker F-27, F100, DC-9, MD80, MD82, Boeing 727, 737-200 thru 400, 757, 767, Airbus A319, A320, A321 and A330.

After 35 years in aircraft maintenance with several airlines, Dennis retired from USAir as Lead Mechanic with inspection certification of both domestic and international (ETOPS) operations. Dennis was Sales Manager of an animal feed mill serving a three state area, Vice President of a photographic business, served on the Board of Directors of the Clinton County Historical Society, and held several positions in his church and labor union.

Hoffman served with AvSport chief flight instructor Prof. H. Paul Shuch on the Boards of Directors of the Piper Aviation Museum and the Susquehanna Air and Space Museum. His hobbies included bicycling and collecting antique bicycles, kayaking, collecting and restoring antique and classic cars, and gardening. He was a member of the Living Faith Free Methodist Church, Mill Hall, and a founding member of the Living Faith Annual Car Show. He was a lifetime member of the Piper Aviation Museum, Avanti Owners Association International Car Club, and Studebakers Drivers Club. After Hurricane Katrina, he served as a volunteer with Habitat for Humanity in the Gulf Coast area.



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### **15. Resources**

For additional information about AvSport of Lock Haven, its aircraft, instructors, training materials, curriculum, and the new Sport Pilot license, please see the following pages of the AvSport web site:

✦ Main Page	<a href="http://AvSport.org">http://AvSport.org</a>
✦ Main Menu	<a href="http://AvSport.org/menu.htm">http://AvSport.org/menu.htm</a>
✦ General Information	<a href="http://AvSport.org/about">http://AvSport.org/about</a>
✦ Press Kit	<a href="http://AvSport.org/press">http://AvSport.org/press</a>
✦ Photo Gallery	<a href="http://AvSport.org/photos">http://AvSport.org/photos</a>
✦ Video Gallery	<a href="http://AvSport.org/press/video.htm">http://AvSport.org/press/video.htm</a>
✦ Flight Instruction	<a href="http://AvSport.org/cfi">http://AvSport.org/cfi</a>
✦ Light Sport Aircraft	<a href="http://AvSport.org/acft">http://AvSport.org/acft</a>
✦ Simulator Club	<a href="http://AvSport.org/simulator">http://AvSport.org/simulator</a>
✦ Maintenance Services	<a href="http://AvSport.org/maint">http://AvSport.org/maint</a>
✦ Upcoming Events	<a href="http://AvSport.org/events">http://AvSport.org/events</a>
✦ Contact Information	<a href="http://AvSport.org/contact">http://AvSport.org/contact</a>
✦ Search Engine	<a href="http://AvSport.org/search">http://AvSport.org/search</a>

or, stop by Hangar One at the Piper Memorial Airport, and pay us a visit.



## Sport Pilot Flight Training Curriculum Development



URL: <http://www.AvSport.org>

Chief Flight Instructor: Professor H. Paul Shuch, CFII

### The Problem:

The completion rate of persons pursuing flight training in the US is below 20%, an all-time low. This is generally attributed to the increasing complexity of airspace, the introduction of advanced aircraft and avionics systems, and the high cost of aircraft ownership, rental, and operation. However, despite significant advances in both aeronautical technology and educational methodology, pilot training curricula have remained virtually unchanged since prior to the Second World War.

### The Proposal:

The introduction by ASTM of the Light Sport Aircraft certification category, along with the establishment by FAA of the Sport Pilot License, presents an opportunity for a significant modernization of the flight training curriculum.

### Vision Statement:

AvSport envisions a General Aviation renaissance, facilitated by quality training of Sport Pilots and the availability of modern Light Sport Aircraft.

### Mission Statement:

- AvSport enhances aviation safety and enjoyment, by offering:**
- a rigorous flight training curriculum
  - experienced, professional Certified Flight Instructors
  - well maintained advanced Light Sport Aircraft
  - modern and accessible instructional materials
  - individualized instruction
  - an affordable aviation experience



### Schedule Milestone and Accomplishments:

- September 2009 (Technology Readiness Level 1)
  - Establish AvSport as an FAR Part 61 flight school; activate website
- December 2009 (Technology Readiness Level 2)
  - Purchase of Evektor SportStar Light Sport Aircraft trainer
- January 2010 (Technology Readiness Level 3)
  - Present business plan to Lock Haven City Council; lease facilities
- February 2010 (Technology Readiness Level 4)
  - Introduce "Three Weeks, Rain or Shine" Pre-Solo intensive course
- April 2010 (Technology Readiness Level 5)
  - Solo first primary student
- May 2010 (Technology Readiness Level 6)
  - Introduce "Three More Weeks of Heaven" Post-Solo intensive course
- June 2010 (Technology Readiness Level 7)
  - Graduate first licensed Sport Pilot
- November 2010 (Technology Readiness Level 8)
  - Complete FAA mechanics training; establish maintenance shop
- March 2011 (Technology Readiness Level 9)
  - Introduce "Pilot Downsize" LSA transition course curriculum

Rev. 16 November 2011

TRL = 9

**Keywords:** Flight Instruction, General Aviation, Flight School, Sport Pilot, Light Sport Aircraft, LSA, ASTM, FAA

## 16. Four Quadrant Briefing Chart



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