



907th Flight Squadron

Club History 1972 - 2016

*Doylestown Airport
Doylestown, PA*

Foreword

This document presents the history of the **907th Flight Squadron, Inc.**, as recalled by its members, past and present.

Formed in 1972 in conjunction with the Civil Air Patrol (CAP) at Doylestown Airport (DYL), the club has a long and colorful background - its success fueled by the efforts of many people, volunteering to do many things, while owning many aircraft. Each chapter covers a segment of the 34 years we have flourished, and we hope you will enjoy the memories recorded over the years. We will trace our history as we progressed from rebuilding an old Piper J-3 to owning the two new Cirrus "state of the art" *Technically Advanced Aircraft* we fly today. Hope you enjoy!

Table of Contents

Getting Started	1
Rebuilding a Piper J-3.....	6
Growing to a 4-Place Aircraft	8
Cardinals Flying High	10
Tigers Appear	13
Magnificent Mooneys.....	16
Cirrus Cleared for Arrival	19
Appendix A: The 907 th Flight Squadron Aircraft.....	23
Appendix B: Aircraft Timeline.....	25
Appendix C: 907 th Flight Squadron Flight Instructors	26
Appendix D: Movers and Shakers.....	27
Appendix E: 907 th Flight Squadron Ground Facilities	28
Meeting/Training Facilities	28
Phase 1	28
Phase 2	29
Phase 3	29
Phase 4	29
Hangars.....	29
Appendix F: Vendors – Past and Present	32
Appendix G: Airports of a Bygone Era.....	33
Appendix H: Airport Restaurant Ratings	34
Appendix I: Flying Club Success.....	35
Acknowledgements.....	36

Getting Started

The formation of the 907th Flight Squadron of a can be traced directly to Einar Olsen. In the fall of 1972, Einar was the new commander of the local Civil Air Patrol (CAP) Composite Squadron 907 at Doylestown, PA. In those days the National CAP had a policy encouraging the creation of flying clubs associated with the local CAP squadrons, and Einar wanted to become a pilot in the worst way. He placed a notice in the *Doylestown Daily Intelligencer* stating that the local CAP squadron was reactivating, and was looking for personnel interested in aviation.

The original meeting was held at the Doylestown Armory. A diverse group of interested folks attended the initial meetings, including several former pilots - most of whom were not currently flying, but who had serious flying interests. The squadron ultimately consisted of both senior members as well as cadets 13 to 18 years of age.

The cadet training agenda included communications, aircraft search and rescue, first aid, survival skills, aircraft handling and flight orientation, and spaceprogram education. Senior members assisted in cadet orientation, and were trained in search and rescue. Some of the early instructors included communications officer Bill Stroup (a ham radio operator who owned a Swift 85 hp conventional gear plane), and first aid instructor Terry Olsen (Einar's wife, who was also a registered nurse).



Figure 1. Einar Olsen and Bill Mount in front of the Communications Shack

The squadron had a communication shack in a corner of Doylestown airport, and owned surplus military vehicles consisting of a $\frac{3}{4}$ ton truck and trailer, a $\frac{1}{2}$ ton Jeep pick-up, and one Jeep (later to be joined by a second one).

During the winter of 1972 - 1973 the squadron evaluated the practicality of organizing a flying club supporting CAP under the guidelines provided in the regulations. A flying club would not only need enough pilots and funding to purchase and support an airplane, but also required fixed-base operator (FBO) and airport authority cooperation and approval, aircraft tie-down facilities, and instructional capabilities.

In just a few months the members had identified and recruited about 30 potentially qualified individuals who supported the concept. They then set about obtaining the needed cooperation of the FBO and the Airport Authority. The Airport Authority granted perpetual use of a 30' by 85' blacktop pad adjacent to the CAP communication shack for plane tie-down. The FBO agreed to the club's purpose as a search and rescue unit and to provide Cadet training.



Figure 2. N6100T (N35245 is in the background)

When spring arrived, focus shifted to finding a suitable aircraft at a reasonable (and affordable!) price. Several of the members had taken flight refresher training at nearby Van Sant Airport, and while there met Terry Harrison, a pilot for U.S. Air. Terry was an Aircraft Inspector who also was a great supporter of youth and general aviation. He agreed to help find a plane, and within a month lined up a possible fit - a 1965 Cessna 150 trainer, N6100T. The C-150 was well used (about 3500 hours total airframe time), had an Automatic Direction Finder (ADF), 1 radio, and an add-on Emergency Locator Transmitter (ELT) to meet the FAA requirement for crash alert. Priced at only \$3,100, the aircraft was purchased with the contribution of \$100 from each of the 31 members ("the good old days").



The airplane was donated to the national CAP, who paid for the insurance. Typically, the national CAP retains the right to move or reassign any aircraft within its possession, but agreed to keep N6100T for exclusive use by Squadron 907 because it was donated.

By May of '73 the members were ready to fly. With 1 plane, and 31 pilots needing familiarization, our 2 instructors, Ed Wotjen and Roland Sprague, did yeoman service. Much of the instruction was provided at no cost. Typical good weather weekends saw 6 or 7 daily flight sessions so that everyone could get checked out. Einar finally realized his dream, and earned his private pilot's license.

During member familiarization training, a few "anomalies" arose. For example, on one flight the student and instructor did not yield to a glider at Van Sant (*instructor comment: "I never heard him"*). On a night trip to Philadelphia International to practice simulated instrument landings, the controller emphatically stated "*We are NOT a training airport!!*" (It seems a passenger jet had difficulty maintaining only 75 knots on long final.) Another fun night exercise consisted of chasing searchlight beams from World War II anti-aircraft units, which by then had been converted to advertising attractions by a local car dealer. A tough job to intercept, and then follow the weaving beam, but good practice on closely monitoring bank angle, climb, and airspeed in a dark environment.

N6100T was very reliable. Fuel burn for the Continental 100 HP engine was 5 to 6 gallons per hour (GPH), with fuel just over \$1.00 per gallon. The club benefited immensely from the joining of Frank Engard, who did most of our aircraft maintenance. Terry Harrison helped out by performing the first few annual inspections.

The squadron was flying over 40 hours per month. Allegedly, this was more flight hours than the 3 rental planes at the FBO combined. Not surprisingly, this caused some friction with the FBO. The FBO claimed the squadron was doing basic flight instruction - thus becoming a competitor contrary to the squadron's described mission of search and rescue. After several meetings, including one with the airport authority, this misunderstanding was resolved. To this day, the flying club will not directly solicit any current customers of the FBO.



Figure 3. Cadet Camp

The early members provided extensive support to the CAP Squadron 907 - both financially through membership dues and contributions, and by participation in cadet orientation and search and rescue training and missions. They frequently conducted weekend drills, practiced communications, provided ELT training, and participated in actual search and rescue missions.

All of the squadron's pilots were required to be CAP members in order to fly in the aircraft. Flights outside of Pennsylvania or New Jersey required prior approval. Overnight flights were prohibited, as well as carrying wives or non-cadet children in the aircraft.



Figure 4. Vern Schramm, Einar Olsen, and Bill Mount with N6100T

During this time Vern Schramm joined the club. Vern was a skilled aviator and Temple professor (who later served several terms as club president.) Under Vern's guidance, the flying club was incorporated as the **907th Flight Squadron, Inc.** Incorporation provided "us" (i.e., the flying club members) with the opportunity to eventually purchase additional (and more expensive) aircraft which did not have to be donated to the national CAP and thus subjected to the CAP's restrictive rules of use and ownership.

The CAP cadet squadron had Lt. Col. Len Dougherty assigned as an Air Force liaison officer in the second year of the club's existence. His assistance to the entire squadron was terrific, and he was an excellent "scrounger" of material of all sorts the club required. Len was also the principal reason a Piper J-3 "basket case" was donated to the club - a story covered in Chapter 2.

Cessna 150 N6100T remained with the club until September 1983, flying over 2,500 very reliable hours and providing hundreds of hours of cadet orientation. Several of these cadets eventually obtained their private pilot's license. The departure of this Cessna began in 1982 with the demise of 80 octane fuel (100 LL caused skyrocketing repair costs), ever stricter limitations by CAP as to usage, and the squadron's need to move to a 4 place aircraft. Ironically, after leaving Doylestown for the last time N6100T became a monument to the CAP at Quakertown where it remained (stripped of equipment) for several years. Undoubtedly the C-150 is no longer in existence. The aircraft registration "N Number" was retired by the FAA and subsequently reassigned to a Fouga CM 170 Magister turbo-jet. The little Cessna served the club well. Sayonara!

Cadet Training

It may be of interest to note how the flight squadron supported the CAP cadets. One principal mission of CAP is searching for downed or missing aircraft. Cadets, when properly trained, are a valuable aid to this mission. The flying club provided training in the following areas:

1. The aircraft environment - On the ground, a cadet's conduct is important in the vicinity of aircraft (whether they are tied down or in taxi mode.) Safety is always paramount. Cadets are taught not to handle propellers or flight control surfaces. The use of chocks and proper tie-down procedures are stressed. Fueling procedures are reviewed. Hand signals used for aircraft taxiing are taught. The tie-down area is examined and prop wash dangers are discussed. Once trained, cadets assist in ground operations under close senior member (pilot) supervision.



Figure 5 - Cadets Preflight N6100T

2. Aircraft pre-flight - Each aircraft model in service requires specific examination prior to flight, and the importance of thorough inspection is stressed. Cadets learn that major accidents are caused if the preflight process is not carefully done.

3. Communication procedures - During actual or practice missions, both visual and radio communications are essential and very detailed. Cadets receive training from the primary instructor, and proper procedures are also reinforced on flights by the pilots. Proper terminology is stressed, as well as operational reporting on a timely basis.

4. Search and Rescue Civil Air Patrol (SARCAP) procedures - Practice for actual missions provided the cadet an opportunity to learn and practice all the disciplines needed to provide efficient search and rescue services when a plane was missing. Emergency Locator Transmitter (ELT) search patterns are taught. Visual aid training helped everyone to understand how to optimize finding a downed aircraft in all types of terrain. Cadets are taught what resources are needed to help assure success. These factors taught the benefits of teamwork and discipline.

5. Red Alert, Civil Air Patrol (REDCAP) – REDCAP is an actual emergency mission. A successful outcome is the purpose of all the training a cadet undergoes. Needed information on weather, flight path, time sequence, number of souls on board, and pilot history and experience are all evaluated. Terrain type and location of navigation aids are also important. Once a crash site is located, attention to survivors, site preservation, and access became primary. Ground teams coordinate with air crews via radio to expedite rescue - time is of the essence!

Summary - By having training and exposure to all the above factors, the typical cadet became a team member, learned much about general aviation, and saw how planning decisions, pilot skills and capabilities, as well as weather and mechanical factors can lead to successful or tragic results. Many cadets went on to become private pilots, obtained advanced ratings, and were admitted to the armed service academies. The lessons learned in the age bracket of 13 to 18 years of age are extremely valuable, and served the aviation community well. The benefits of the CAP cadet program remain for a lifetime. Lastly, the satisfaction of those who taught these fine young people was extremely rewarding.

Rebuilding a Piper J-3

In late 1973 the club heard of a Bucks County resident who might be willing to donate a 1941 Piper J-3 Cub to the CAP squadron. The uncle of one of the club's members, Jerry Melson, had a disassembled J-3 in the basement of his Solebury residence. The Cub, N35245, was complete but needing rebuilding. Col. Len Dougherty helped start the process of determining whether the club had the resources to rebuild an airplane. Once that was confirmed, the donation was arranged and then completed.

Terry Harrison agreed to re-cover the wings for the cost of materials. A trailer was obtained and Lou Baez used his VW van to move the wings to Terry's New Jersey farm/airstrip for extensive examination and re-cover work. Lou's van would subsequently see extensive use during this project moving each major portion of the aircraft to and fro.

The airframe rehabilitation, including electronic testing, rust removal, tail wheel section rebuilding, and repainting was done in Solebury at the farm/airstrip of Sal Lebate, a pilot for American Airlines. Hartford Steam Boiler electronically tested the airframe for integrity. Lou Baez welded the needed tail wheel reinforcement material, and a work crew of many sanded and painted the fuselage tubing.

The engine rebuilding was perhaps the biggest (personal) challenge. Joe Cianci, a Doylestown CAP supporter and a handicapped machinist, did the rebuild in his basement. Joe was born with one shortened arm with no hand, but was able through innovative techniques to meet all of life's challenges. He obtained the overhaul manual for the 65 HP engine, and the manufacturer's rebuild kit containing all the needed parts requiring replacement. He sketched a log to record each step in rebuilding, including each specification required and the actual recorded clearances and torque values as reassembly proceeded. Parts were painted as needed. accessories were completely rebuilt. *This was all done solo*, without assistance. Then, an aircraft inspector reviewed each step of the overhaul, checked tolerances and torque as required - and signed off the overhaul - PERFECT - and amazing!

After completion of the airframe painting, Lou towed the fuselage to Bill Mount's Doylestown garage for examination and/or replacement of running gear, bungee, and brakes. Additionally, the engine was reinstalled. All new hardware was obtained, installed and checked (well, almost all; more on that later.) The completed engine and fuselage assembly was rolled out of Bill's garage, fueled, the wooden propeller was mounted, and with 3 spins of the prop it came to life. Joe's care had paid off!

The next step was to tow (where is Lou?) the engine and fuselage assembly to New Jersey so Terry Harrison could recover the fuselage. The cowl and metal parts were painted. Rigging and flight controls with new cables were double-checked. Frank Engard made several trips to Terry's airstrip, working alongside Terry to set up and install the engine controls, brakes, and many miscellaneous parts. After about a month the plane was assembled and ready for flight.

Final inspection took place, and the plane was *Ready for Test Flight*. Five gallons of fuel were loaded into the 12 gallon tank. Ground runs and final adjustments were made. Terry taxied to the end of his less than 2000' long grass strip. After a final run-up, cockpit controls were checked, throttle advanced and brakes released. In about 500' the Cub was beautifully airborne. Terry raised the nose to clear obstacles at the end of strip and the engine quit! Having little choice, Terry lowered the nose. Surprisingly, the engine again purred and climb resumed at normal rate. Terry circled back and landed smoothly.



Figure 6. Pennridge approach from the J-3

The problem? Fuel starvation. Why? In a J-3, fuel is fed by a firewall tank clamped to the engine mount. When the plane was originally disassembled, we neglected to notice that the 2" clamps were mounted upward to raise the tank to highest possible position. When the clamps were reinstalled, they were pointed downward, thus lowering the tank a few inches - enough to starve the engine of fuel when only 3 gallons or so remained. Since the tank could not be relocated without major work, after thoughtful consideration it was decided to clip 2" off the fuel gauge floating wire indicator (seen thru the windshield) and re-placard usable fuel at 2 and 1/2 gallons less. Usable fuel became 9 gallons, giving 2 hours of flight on a full tank (slightly more if level flight was maintained). No steep climbs when minimum fuel condition existed.

The J-3 allowed our pilots to become tail-dragger proficient. Also, we learned proper methods of "propping an airplane." The J-3 had no electrical system, and in winter, offered no way for a pilot to keep truly warm. This was a great "snowmobile uniform required" craft. As an observation platform with a hand held radio, this was a valuable local CAP tool.



Eventually (August 1975) we sold the Cub. Cadet orientation in crowded traffic patterns at the airport added risk. Solo hand-propping introduced hazards, and it really was a summer airplane. Our only regret was not foreseeing the future investment value - we might have traded even for a nice Cessna 172 only a few years later.

If you have never flown in a Cub, take a couple of hours and do so. The thrill of flight on a summer day with open window and door is unforgettable. The airspeed numbers are easy. Climb, cruise, and descent airspeeds are all the same. The J-3 was a wonderful airplane loved by both the cadets and the pilots who flew her.

Growing to a 4-Place Aircraft

In mid-1975, the club began to explore plans for the future. Our original C-150, having been donated to CAP, operated under their rules and control. The rules and operating conditions were getting more strict. 80 octane fuel (a C-150 requirement) was getting scarce, and even though it was available in nearby Trenton, NJ, CAP approval was required to leave the state for fuel.

The club recognized that a 4-place plane - perhaps a Cessna 172 Skyhawk - would better fulfill our needs, and benefit both the club and CAP. During search and rescue training, as well as actual missions, the higher horsepower of a C-172 was advantageous - especially in the mid-state mountain ranges. We could carry two observers instead of one, making the flights more effective. The extra seats could make the training of cadets and orientation on Search and Rescue (SARCAP) exercises more effective as well. Since the flying club incorporated separately from the CAP (and thus eliminated the many control issues that restrained us) purchasing a 4-place airplane would also enable pilots to use the plane for family trips. A C-172 would make an easy transition for C-150 pilots, and insurance costs on the Skyhawk would be reasonable.



Figure 7. N7059G

Based on the above, the club began a search for a C-172. Our budget was limited, but in August 1975 we located N7059G, a 1969 model K with a mid-time engine that could operate on 100 octane fuel if necessary. The paint scheme was brown, mustard yellow, and white. The plane was basic IFR-capable, in spite of the problematic ARC radios. The best accessory of all was a "boom" mike. The plane cost \$11,000 and was located locally. The club moved quickly to seal the deal.

We operated the aircraft without many problems (except for the infamous ARC radios) until May 1976, when it was traded for a newer 172 with lower engine time and better equipment. The current FAA registration record shows N7059G is currently operating in Longview, Texas.

As the engine on our original C-172 approached overhaul time (early 1976), the club decided to search for a low-time full-IFR capable C-172, rather than complete an overhaul. (The tradition of upgrading planes before overhaul continues to this day.) In July 1976, we found a low time 1973 model M, N13435, that was affordable at \$18,000. Fully IFR-equipped, with a beautiful red and

white paint scheme accented with blue stripes, this purchase was a great opportunity to upgrade. The interior had many accessories, including full panel indirect and post lighting. There were less than 400 hours on the tachometer, and we had a buyer for 59G. The deal was done.



Figure 8. N13435

Club members flew this most reliable plane all over the country - including several family trips to the west and northwest United States. It also participated in many Civil Air Patrol SARCAP and REDCAP missions as well as regular cadet orientation flights.

During this time, another helpful instructor, Jack Woodward, joined our club. We were also blessed with the addition of Don Hendricks, a former Navy NCO, and his wife Myra, who both flew their own C-150. Don's ability to scrounge anything needed was invaluable. He and Myra helped the organization tremendously.

Myra was from England and considered a witty and hearty soul. She obtained her pilot's license while a CAP member but had an unfortunate encounter with the FAA examiner when she took her test for the private pilot license. She allegedly got chewed out royally (pardon the pun) because the examiner did not like where she parked on arrival for her flight test. Myra passed her test with no problem, but it was reported that she was seen leaving 2 days later with a pound of Limburger cheese for the very same New Jersey airport where she took her test. It seems that the main building at this airport was heated by a pot-belly stove. When Myra got to the airport the flight examiner was on a flight test, but she left him the cheese as a present – right on top of the pot-belly stove. Mission accomplished!

In June 1978, the club traded 435 for a new Cessna Cardinal and bid the aircraft adieu. The current FAA registry shows that today 435 has co-owners in El Paso, Texas, who have been flying it since November of 1996. It was a great airplane!

Cardinals Flying High

During the mid-1970's more members of the 907th Flight Squadron were becoming IFR rated. While our trusty Cessna 172 N13435 was busy flying to places like New Orleans, Phoenix, and South Dakota, members wanted a faster, better equipped plane with more range.

In late 1977, the club looked at a brand new Cessna Cardinal at a Princeton, NJ dealership, but the price was \$36,000 - twice the cost of our last nearly new 172. Our conclusion - "unaffordable".



Figure 9. N20237

At year end, the area was hit with a significant snow storm. During the plowing and clearing of the ramp at the Princeton airport, a snow plow hit the stabilator on the same new Cardinal we had previously considered purchasing. Still wanting to upgrade, we negotiated a new (repaired) price of \$29,500, after insurance recovery, with the dealer. Significant repairs were done in Massachusetts, and by June of 1978 we had our first medium performance new aircraft.

Well equipped for IFR, N20237 had an ADF, full Instrument Landing System (ILS) capability, vinyl interior, and a full night light package. It was a beautiful plane! For transition training, we turned to Marge Bryant, a Pennridge co-owner and excellent instructor with hundreds of hours of Cardinal time. Landings were a bit tricky, and we had to learn the idiosyncrasies of the variable speed prop, but the transitions went well.

Cessna's New Cardinal

In the mid-1960's, Cessna Aircraft Company began to design a new and improved plane intended to fill the gap between the Cessna 172 Skyhawk and the Cessna 182 Skylane. By 1968, they introduced the Cardinal. Powered by the same 150 HP Lycoming engine with fixed pitch prop as the 172, this new model offered much improved visibility due to a strutless cantilevered wing that was moved one foot aft. It also provided easier access to a lowered, enlarged cabin with large entry doors. Another feature was the one piece rear stabilator, replacing the standard stabilizer/elevator assembly. The streamlined look and curved wing cowl panels created a beautiful, aesthetic effect.

As the new model began daily usage, a couple of problems surfaced (not unusual in any new airplane). First, the plane proved to be under-powered. By the mid-1970's the engine was upgraded to a 180 HP Lycoming and a variable pitch prop, which greatly improved performance. Also, a retractable version was offered, although the nominal gain in airspeed made this version less popular. Another problem, later addressed with a mandatory airworthiness directive, was the loss of stabilator lift during landing flare, causing a porpoising effect. This issue was corrected by insertion of slots in the leading edge of the stabilator. By the mid-1970's, the Cardinal had proved its worth as a viable and reliable means of transportation.

Our C-172 was sold in Massachusetts. Although we were still flying the C-150 N6100T, it was becoming more restricted in its use. The Cardinal proved to be popular, and the club began to think about a second non-CAP plane with standardized equipment. Having two similar planes would be a big plus for IFR and for safety. At this time the club had more than 30 members, and the demand for flight time for vacations and extended trips was overloading our sole Cardinal.



Figure 10. N19976

In March 1979 the club learned of a duplicate 1977 Cardinal based at Wings Airport in nearby Blue Bell, PA. The Cardinal had been used as a demonstrator, and had about 200 hours of flight time. It also had previously experienced a nose-wheel collapse. However, it had an autopilot, which is a huge benefit in IFR operations. The price was right (\$28,000) so we agreed to purchase it. The damage history was less important since our other Cardinal also had original damage history. Due to anticipation of long time ownership, we felt this was a minor consideration - a theory that ultimately proved correct years later at time of resale.

John Hall, a Doylestown FBO instructor, assisted with further checkouts for the club. Both Cardinals proved to be great aircraft, and the engines were bullet-proof; the only issue was the ARC standard Cessna radios which seemed to always have glitches. These planes taught us important lessons:

- 1** Stable approaches are needed for good, consistent landing results.
- 2** Always park facing into the wind - otherwise the barn-sized doors may be caught by the wind and deformed.
- 3** Prop clearance on a lower slung plane is limited, and it's critical to keep this in mind when taxiing.

Both Cardinals flew with us until mid-1984. N20237 was sold to a flying group in Clearfield, PA, and is still in service with them today. The sale of N19976 was made to an Ohio Aircraft and Power plant (A&P) mechanic. Today, this plane is located in Sioux Falls, SD.

It is interesting to note that in 1982 the club located and purchased a C-150, N19201, that was *not* donated to the Civil Air Patrol. Don Hendricks, a valuable former member, had relocated to Florida and assisted in arranging the Tampa area purchase. It was "exciting" to fly over the Georgia

swamps in an older airplane with unknown history, with very low temperatures and significant headwinds.



Figure 11. N19201

The new C-150 replaced the club's original N6100T, which was turned in to CAP's national headquarters. N6100T's airframe had outlived its useful life, and the engine was due for replacement. N19201 was added to allow the flying club to continue to offer very low cost flying to our members on a limited budget - noting that mid-range performance aircraft did require higher operating costs.

We flew the newly acquired C-150 until August 1986. By that time its usage was declining, and the club desired to utilize its funds for the 4 place aircraft that were our focus. N19201 is still based in Doylestown today. It sports the red, white and blue paint scheme we had done in Millville when purchased.

A major player in this period of the club's operation was Denny McFadden, who followed Vern Schramm, coordinated the financing, purchase, and sale of the last three 907th Flight Squadron planes. Denny has served as President for several years, and spearheads the membership cleaning and waxing of our planes to this day.

NEXT: A further step-up in performance and complexity . . .

Tigers Appear

After 7 years of operating, the Cardinals began to show their age, and engine times were approaching the 2,000 hour overhaul mark. We discussed finding a replacement aircraft that was faster, yet simple - reliable and proven. The new aircraft also had to be economical. As the club became experienced in buying and selling planes, we found that money put aside for engine overhauls could be better utilized by upgrading to a different, newer, and/or faster replacement aircraft. Flying costs (with interest payments) for a new plane were not significantly different from our older models with higher repair costs.

Several members suggested we consider the Tiger. The Tiger line was originally produced by Grumman American, and later by Gulfstream American. It was faster than the Cardinal, had fixed, trouble-free landing gear, and had good useful load due to its composite construction. The O-360 Lycoming engine was "bulletproof" and generally could be counted on to reach Time Before Overhaul (TBO).



Figure 12. Bill Mount next to N4524M

In mid-1984 the club found a recent model 600-hour fully equipped Tiger based at Doylestown. Navigation and instrumentation were King, known to be far superior to the ARC brand utilized by Cessna. A dealer in Elizabethtown, Flying Tigers Inc., had serviced this plane and knew its history. Equipped with dual glide slopes, an ADF, and an autopilot, N4524M met the squadron needs nicely.

After selling Cardinal N19976, we procured this aircraft and placed it on the line. The controls were quick, the aircraft was sporty, and entry was simple due to the slide back canopy. The canopy was a great way to keep cool in summer, since you could fly with the canopy *slightly* open on hot days. N4524M taught us how to operate a free swiveling nose wheel - a bit tricky to taxi in slush, snow, or on soft ground. Use of brakes became primary for taxi and rolling for take-off. Flying Tigers, Inc. proved to be an excellent repair facility, and marked a transition for the club to using a specialty dealer for maintenance rather than a "jack of all trades" shop.

Our principal instructors were Bill Doyle, Marty O'Donnell, and Andy Knox (from the FBO) who assisted in the transition training. Even more members became IFR rated, and the King equipment, with great redundancy and a good auto-pilot, made this plane very popular. The capability for

longer cross country trips was a plus, and longer flights to places like Oshkosh occurred more frequently.

We flew N4524M (very un-eventfully) until 1990, when we decided it was time to upgrade. Flying Tigers arranged for us to purchase the first new American General Tiger made in Greenville, and we agreed to trade our first Tiger towards a new Tiger. Today, our first Tiger is still flying, and FAA records show it is registered to an owner in Vienna, VA.

Our delivery date on the new Tiger slipped due to unforeseen delays. We extended the use of N4524M with the help of the dealer and the cooperation of the new owner, who agreed to let us use it at a fixed hourly rental rate.

We had arranged to purchase the new plane sans avionics (to be dealer installed) - not a good move since it caused yet further delay in final delivery. We did, however save significant costs, with a final price of \$91,750.

The flights to and from the plant were most exciting. Frank Engard and Bill Mount were ferried to Mississippi in a pressurized, turbo Aerostar. They left Elizabethtown, PA in fog after making a zero-zero take-off. The trip down was very quick - less than 4 hours. The duo were treated royally by American General - including pictures of their first delivery, serial number 1, with overnight accommodations and a great dinner included.

The 8 hour return trip in N907AP (the first of 3 airplanes to carry the "907" designation as part of the N number) provided an eye-opening view of the poorest sectors of America - including Mississippi, Tennessee, and West Virginia. Adding to the excitement was a lack of avionics except for a hand-held radio with a 5 mile range. Fortunately, the weather was good, and the flight crossed very little controlled airspace.

American General

During this time, Gulfstream stopped producing Tigers. A new manufacturer, American General, took over the Tiger line with a new plant in Greenville, MS.

The plant, owned by municipal bondholders, was designed to install upgraded engines on older Boeing airliners. Unfortunately, just as manufacturing equipment was to be installed, the infamous Hawaiian 737 cabin catastrophic failure occurred due to metal fatigue. The industry re-evaluated the wisdom of installing new engines on older airliners, and Boeing backed out of the Greenville lease agreement.

This created problems for the city bondholders, but a low cost opportunity for American General, who took over the plant and enhanced the Tiger design.



Figure 13. N907AP

We Learned About New Airplane Purchases from That ...

As we took delivery, we encountered a number of unforeseen issues with the new plane. One was a nose-gear collapse due to a faulty tube bolt installation. Fortunately, this occurred at low power and slow taxi speed. The second (and worst) event was loss of braking while taxiing, due to cracks in the right brake line. Faulty material was used in the brake line construction! This resulted in a collision with a parked plane (which received little damage) but we needed to replace the right composite wing on N907AP. The running gag was, "It takes different skills to build airplanes than to feed catfish!"

Conclusion: Once the initial bugs were resolved, the reliability and usefulness proved to be excellent. If we could buy another Tiger today for about \$92,000 we would do it in a minute. It is ironic to note that today, 2 manufacturers later, the Tiger pricing is comparable to the new Cirrus aircraft.

We flew the plane until March 2000, when the club sold it to an owner based in LaFollette, Tennessee.

Magnificent Mooneys

By mid-1984, we had sold both Cardinals, obtained a used Tiger, and were searching for a second aircraft. The club wanted an aircraft with favorable flight characteristics - speed, economy, good cross country capability, and a rugged, reliable airframe and engine combination. Most of our members had become instrument rated and business trips were a growing segment of daily usage.

Mooney airplanes seemed to fit our needs, and most Mooney owners spoke highly of their aircraft. However, our impression at the time was that the cost of entry might be beyond the club's reach. Nevertheless, the long range and retained value of the Mooney 201 were very attractive, and our search for a low time, used 201 began. Adding such a plane to our inventory would permit club members to become rated in a complex type aircraft, providing the opportunity to further advance their aviation skills.



Figure 14. N3515H

We located a suitable low-time privately owned 201 in Maryland. N3515H was fully equipped, including enhanced Area Navigation (RNAV) capability. This magic (at that time) navigation system was a desirable, advanced feature which permitted the pilot to track direct to any destination via electronic means. In the days before GPS, this was a *great* feature. In addition to the on-board King equipment and autopilot, excellent engine instrumentation made this a viable purchase for \$39,296.



Andy Knox, and later Bill Doyle, handled the check-outs needed due to retractable landing gear and little "time in type" by our pilots. The familiarization process was accomplished without difficulty - though the handling characteristics and control feel were very different from the Tiger.



Figure 15. World Trade Center, NYC, from N3515H, circa 1986

We flew this airplane from 1984 to 1987. The only mishap occurred with a nose gear strike from a landing-short event at Marlboro, N.J. - a short runway with difficult approaches (the field is now closed). Traded in 1987 on a new Mooney, N3515H is currently based in East Falmouth, MA. Interestingly the engine was replaced and upgraded to a Continental IO-550, which significantly increased the aircraft's performance capability.



Figure 16. N5752E

N3515H's replacement, N5752E, was purchased in August 1987 and began service with no equipment changes or modifications. An autopilot was now standard for all club-purchased planes. Transition was easy, since most of our pilots had accumulated experience in N3515H. No problems were encountered in continuing insurance coverage.

N5752E flew uneventfully until it was replaced by N1084B in late 1994. Currently, 52E is listed in the FAA registration database as "Exported" to Germany.



Figure 17. N1084B

N1084B was purchased directly from the Mooney sales force for \$170,000. The club's previous Mooney experience (excellent) warranted the step up to this fully equipped, nearly new plane. We utilized this addition fully, and it was the favored airplane by most members. A full engine monitoring and avionics suite with fully tracking autopilot including altitude hold made it an excellent IFR platform.

As wear began to show, we replaced the engine with a Mattituck unit following an unfortunate gear-up landing in Pittsburgh. The rework and repair was accomplished by Weber Aircraft after ferrying the plane back from Pittsburgh. It took about 3 months to complete repairs. Most damage was replaced with new parts, so looks and performance were unaffected. Insurance recovery made us whole - a tribute to the industry.

About 1 year later, the club replaced the plane's interior - a beautiful job! We also added a state of the art Garmin Global Positioning System (GPS) navigation unit. In mid-2003, an unfortunate series of events led to destruction of this aircraft. On a flight to Buffalo, magneto problems occurred and were locally repaired. A few months later, returning from a New England flight, the magnetos failed completely, resulting in a forced landing at an old abandoned airstrip. No damage occurred in the forced landing. Repairs on site took 2 weeks, and when completed, the plane was totaled during departure. The plane did not get airborne, hit a tree, and was destroyed. Fortunately, no injuries occurred. Again, the insurer response was excellent, although the net loss to the club was \$25,000. Even worse, the insurer was not willing to continue coverage for any retractable gear aircraft for the flying club, even though the landing gear was not a factor in the accident. The aircraft was sold for salvage, and is no longer in service.

Needless to say, this event was a significant blow to the club, and we were forced to look for a suitable replacement with fixed gear. However, our experience with the 3 owned Mooneys was excellent. These reliable, economical planes were well built and with good pilot care are among the best craft available.

Cirrus Cleared for Arrival

When it came time to replace the club's Tiger N907AP, Denny McFadden and his committee explored in detail whether the new Cirrus SR20 was suitable for flying club applications. The answer seemed to be "Yes". The advantages included speed, light weight, fixed gear, and an emergency parachute system capable of safely lowering the plane to the ground in event of unforeseen emergency.

The 907th Flying Club placed an order with Cirrus. Initial delivery was expected in early 1999. The price was \$142,500, about \$30,000 less than we paid for Mooney N1084B.

As is often the case, promised delivery was postponed several times due to factory delays in certification.

In November 1999, the committee carefully examined a demonstrator shown at the AOPA Expo in Atlantic City, and later arranged for a half dozen pilots to test fly this aircraft at Doylestown. Enthusiasm was evident based on handling and performance, and the avionics suite convinced us that our decision was sound.

We finally took delivery of N907FS in May 2000.

Cirrus Design Corporation

Cirrus Design Corporation was formed in 1984 by Alan and Dale Klapmeier, and friend Jeff Viken, to sell homebuilt aircraft kits. Their aircraft designs varied, but the company became known for its aircraft performance, with highly efficient laminar flow wings, tails, and fuselage, and light-weight, composite construction materials.

In 1997, Cirrus committed to manufacturing a certified single-engine, 4-place aircraft. Their SR20, and later SR22, changed the future of general aviation, through sleek, innovative designs, advanced avionics, high performance engines, luxury interiors, and CAPS – the Cirrus Aircraft Parachute System. Cirrus is the first manufacturer to be awarded FAA certification for a production aircraft that includes a ballistic parachute system.



Figure 18. N907FS at a Cirrus fly-in on Nantucket Island

We worked closely with Avemco, our insurer, and put together an extensive ground school with check-out guidelines to help assure safe transition to this new model. The aircraft was not difficult to fly, but had characteristics such as side stick controls, the parachute system, and upgraded avionics including glass panel display.



Kudos to Bill Doyle for his dedicated efforts to assure competence in flying N907FS - his efforts in establishing and presenting individual ground school transition were very professionally done. Also valuable was the assistance of instructor Bob Tonkinson in completing pilot transitions.

The first year of ownership presented many challenges. Warranty items caused many trips to the Lancaster service center. Glitches in nose wheel operation, flap and door problems, and electrical issues required extensive corrections. Fortunately, we expected some learning curve issues to occur, as is normal with any new model airplane. The popularity of the aircraft among our pilots overcame the mechanical and electrical issues, and usage exceeded our expectations.



Figure 19. N907MM

The flying club operated this Cirrus for about 2½ years, and decided to replace it because the warranty had expired and maintenance costs were a major concern. The replacement was a brand new 2003 SR20 - N907MM. N907MM was flown home to Doylestown from the factory in February 2003. Unfortunately the SR20's price had increased by nearly \$40,000 and the price tag exceeded \$191,000. We had custom ordered the equipment we needed, including Stormscope, so it arrived ready to fly. While N907MM was a several knots faster than its predecessor, it also weighed more, thus reducing useful load by about 50 pounds. Part of the weight increase was due to "all electric" configuration - eliminating the vacuum pump system, but adding the weight of a second alternator.

The improvements over our original SR20 were significant. An added bonus was that we had switched service centers to use Lincoln Park, N.J. The increased satisfaction realized from these changes made a huge difference in reliability.

When we lost Mooney N1084B in 2003, the insurance carrier would no longer cover retractable landing gear aircraft for the club. Additionally, they required that all pilots in the club have at least 400 hours of flight time - changes which have had major negative lasting impacts.



Figure 20 - Frank Engard next to N1287C

We needed to replace the Mooney, and Denny McFadden again came to our rescue. We located a new (cancelled order) 2003 SR20 at the Cirrus factory, although the asking price was \$225,000. Through negotiation, and leather interior removal, we completed the sale and purchased N1287C for \$217,000. The price did, however include a recording engine management system which is a valuable addition. Also, we gained the advantage of having almost duplicate aircraft which helps considerably in maintaining pilot currency and proficiency.

Through effective budgeting and early loan payoffs the club now owns 2 practically new unencumbered planes, with available slots for new members and a bright future. Challenges include warranty expiration, and future assistance in maintaining the planes. So much of that work has been accomplished by Frank Engard - who has proven invaluable. Every club member appreciates the many years of service Frank has provided. We do welcome additional pilot members who have previous general aviation experience and who desire the opportunities to join a well established, financially sound organization that rewards its members by enhancing the thrill of flight.

In early 2016, club members felt it was again time to go plane shopping. As we looked towards the future, the members decided to sell one of the planes and purchase a newer-model SR20. This would give us the advantage of a "glass cockpit" in place of the "standard 6-pack" of flight instruments, as well as design enhancements which correct some of the problem areas on the early model SR20s. In March, 2016, the club listed N1287C for sale. An interested buyer was quickly found, but after the pre-purchase inspection decided against the deal. The club offered N907MM, and a deal was quickly struck for \$98,000. N907MM departed the club in April, 2016 for its new home in England!

With the sale of N907MM, search for a replacement picked up momentum. Several candidates were identified and evaluated. Finally, the club located a pristine Cirrus SR20, N388RX - a 2006 SR20 GTS with 167.1 hours on the Hobbes meter. It was originally purchased new by a student pilot for \$325,240, and due to external challenges he stopped flying in 2013. N388RX has an Avidyne glass cockpit primary flight display and multifunction display, dual Garmin GNS-430 GPS units, and several other features. The club completed the purchase of N388RX in June, 2016, for a purchase price of \$140,000 – without the need to incur any debt!



Figure 21 – N388RX upon intial inspection by Eric Gertz and David Juall

Special thanks to Eric Gertz, David Juall, and club president Paul Hagerty for the long, long hours, hard work, and expertise they put into the sale of N907MM and the purchase of N388RX.

Appendix A: The 907th Flight Squadron Aircraft

Our Airplanes...



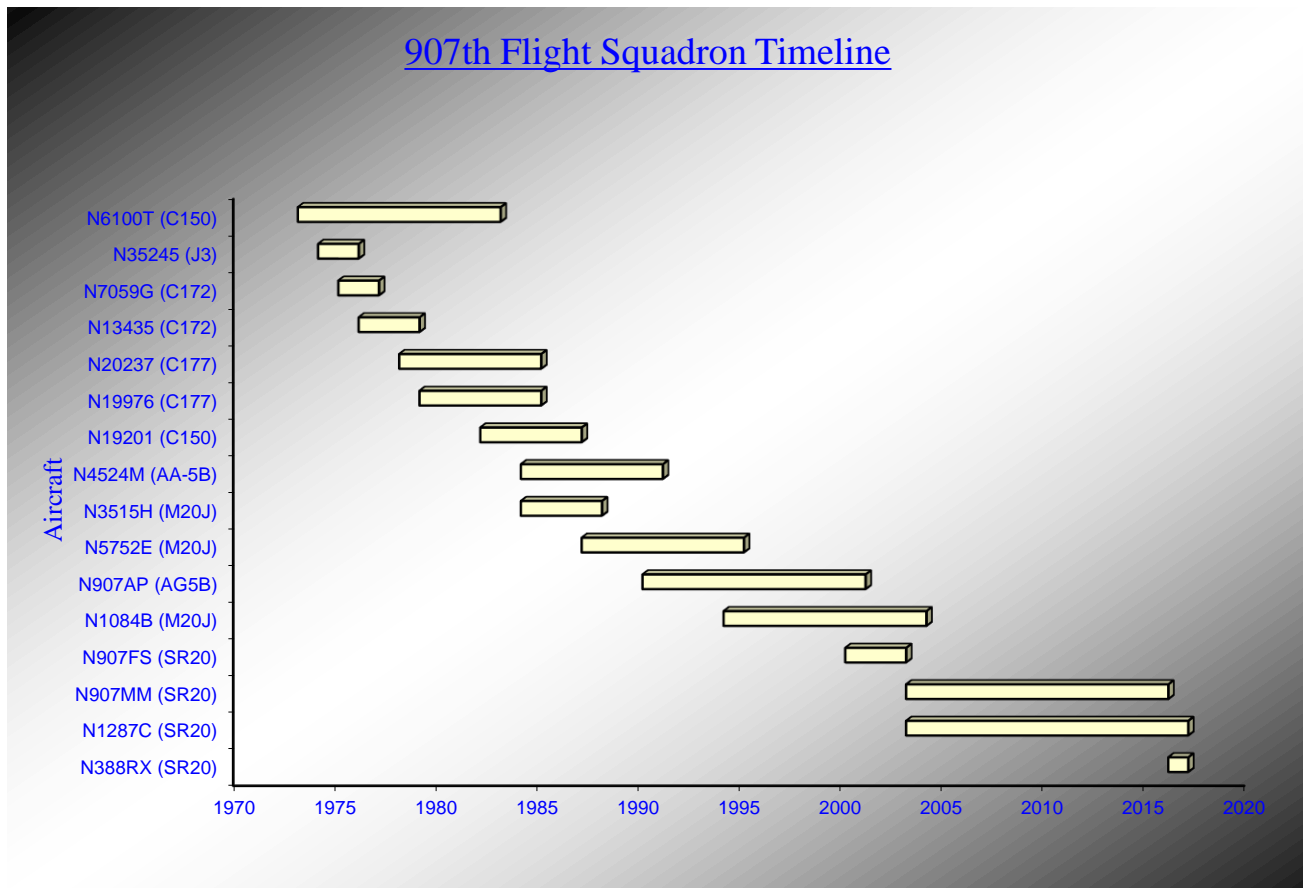
N-Number	Manufacturer	Model	Serial #	Year Manuf.	Dates Owned
N6100T	Cessna	C-150	n/a	1965	08/1973 to 08/1982
N35245	Piper	J3C-65	6240	1941	04/1974 to 08/1975
N7059G	Cessna	C-172K	17258759	1969	08/1975 to 04/1976
N13435	Cessna	C-172M	17262749	1973	06/1976 to 06/1978
N20237	Cessna	C-177B	17702650	n/a	07/1978 to 08/1984
N19976	Cessna	C-177B	17702618	1977	03/1979 to 05/1984
N19201	Cessna	C-150L	15074232	1972	10/1982 to 08/1986
N4524M	Gulfstream American	AA-5B	AA5B1102	n/a	06/1984 to 11/1990
N3515H	Mooney	M20J	24-1034	1980	06/1984 to 08/1987
N5752E	Mooney	M20J	241610	n/a	08/1987 to 12/1994

Our Airplanes...



N-Number	Manufacturer	Model	Serial #	Year Manuf.	Dates Owned
N907AP	American General	AG5B	AG5B-10001	1990	09/1990 to 03/2000
N1084B	Mooney	M20J	24-3266	1992	12/1994 to 07/2003
N907FS	Cirrus Design	SR20	1030	2000	05/2000 to 11/2002
N907MM	Cirrus Design	SR20	1270	2003	02/2003 to 04/2016
N1287C	Cirrus Design	SR20	1311	2003	10/2003 to present
N388RX	Cirrus Design	SR20	1631	2006	06/2016 to present

Appendix B: Aircraft Timeline



Appendix C: 907th Flight Squadron Flight Instructors

IN RECOGNITION of the many hours generously donated to the 907th Flight Squadron and its members to assure safe and proficient flight operations, we thank the following flight instructors for their time and efforts:

EARLY '70S - OUR BEGINNINGS:

- Roland Sprague - C-150, C-172
- Ed Wotjen - C-150, Piper J-3

MID '70S - MOVING TO 4-PLACE AIRCRAFT:

- Jack Woodward - C-150, C-172
- Paul Supina - Piper J-3, C-172

LATE '70S – MEDIUM-PERFORMANCE AIRCRAFT:

- Marge Bryant - C-172, C-177 Cardinal
- Bob Hall - C-177, Tiger AA5B
- Andy Knox - Tiger AA5B, Mooney M-20

THE '80S, AND BEYOND - COMPLEX / RETRACTABLE / TECHNICALLY ADVANCED

- Bill Doyle - Tiger AA5G, Mooney, Cirrus SR20
- Ron Konietzko - Cirrus SR-20
- Marty O'Donnell – Tiger AA5G
- Paul Smith - Mooney M-20J
- Bob Tonkinson – Tiger AA5G, Mooney M-20J, Cirrus SR20

NOTE: Special thanks to Bill Doyle who spent many hours preparing ground school, specs, charts, presentations, and other tools to aid our pilots' understanding and safety.



Figure 22. Bill Doyle on approach to DYL 23 in N907MM, November 2004

Appendix D: Movers and Shakers

Listed below are some of those who made outstanding contributions to the 907th Flight Squadron through the years:

Einar Olsen	907 th Civil Air Patrol (CAP) Squadron Commander
Col. Len Dougherty	J-3 donation and funding
Jerry Melson	J-3 rebuild facilities and equipment
Sal LeBate	Materials and labor on the J-3
Joe Cianci	J-3 engine overhaul labor
Terry Harrison	Found our C-150; conducted the first flight in our J-3, assisted in assembly and performed sign-off
Bill Stroup	SAR CAP plans, radios
Lou Baez	Repair parts and transportation
Denny McFadden	Aircraft buy and sell guidance – club president – Cirrus liaison and tracking
Vern Schramm	Club president, incorporation of the 907 th Flight Squadron, Inc., finance, aircraft replacement arrangements
Scott Minnucci	Trailer facility, hangar, Airport Authority and FBO relations, former club president
Don Hendricks	Navy resource access, located and purchased second C-150 in Florida
Mark Fischer	FAA records, regulations, information
Joe Lynch	Aircraft transport, hangar modifications
Eric Gertz	Club treasurer, as well as Cirrus, COPA, and vendor liaison
Frank Engard	A & P mechanic who has been maintaining our aircraft, conducting repairs, inspections, and complying with service bulletins and airworthiness directives for over 30 years!!
Steve Canfield	Secretary, currency records, editor for the squadron history
Bill Mount	Bill's wisdom and dedication throughout the years have been instrumental in plotting the course for the 907 th , and keeping "the needles centered" as we progressed.
David Juall	Provided excellent legal advice and support pro bono for the sale of N907MM and the purchase of N388RX

Appendix E: 907th Flight Squadron Ground Facilities



Figure 23. Denny McFadden and Bob Harrington wash N907MM

Other chapters in this history booklet deal primarily with aircraft acquisition and use. Over the 34 years covered, there were also major changes in buildings, hangars, and fixed facilities of the flying club and the Civil Air Patrol (CAP).

Meeting/Training Facilities

As outlined in Chapter 1, our airport presence in 1973 consisted of a single communications shack of 60 square feet. The unit was formerly a portable building designed for a $\frac{3}{4}$ ton army truck, and contained radios and other related gear. Bill Stroup, communications officer, had set up this tiny facility, located on our blacktop pad, to teach cadets communication procedures. The armory, used temporarily for meetings, was soon going to be unavailable, so we needed to expand to accommodate meetings and training exercises.

Building changes over the years consisted of 4 major phases which are described below. Due to loss of CAP records, the dates given are approximate.

Phase 1

The first priority regarding facilities was to find a suitable portable building that could be located at the airport, large enough for meetings and cadet training. Col. Len Dougherty and Don Hendricks agreed to approach Willow Grove Naval Air Station to see if a surplus trailer might be available. Due to their connections, we obtained approval to move a 10' x 50' trailer to Doylestown for our use. The unit contained a Commander's office, a communications room, staff desks, and file space in a cubicle, and a 10' x 25' meeting / training area. Friends of our unit did the actual move, and we all helped anchor and rehabilitate the trailer to be ready for use. This enabled us to move all meetings to the airport by the Spring of 1974 - a much more suitable situation.

Phase 2

As our flying club and the Cadet squadron grew, we needed more classroom and storage space for gear. We again approached Willow Grove authorities in 1977 and were granted transfer of a doublewide building totaling 24' x 45'. We planned to install them at right angles to the existing trailer, thus shielding our planes on tie-down from the prevailing winds. The "new" units needed extensive roof and interior repair. The inside was rehabilitated to make a refreshment area, 2 private offices, a large meeting room, and a 12' x 10' storage area. After many Saturday work parties we now had facilities that met our needs. We could host group-wide search and rescue exercises, and actual search missions - a big improvement. Vern Schram and Ron Pieringer led the flying club work parties, and cadets did the bulk of the re-roofing and interior tear-out.

These buildings served the club for over 20 years, but by the late 1990`s had deteriorated significantly.

Phase 3

It so happened that prior to 2000, the Airport Authority needed to update its 10 year growth plan. They wanted to utilize the CAP space for future expansion for parking or avionics repair. As an incentive for us to move, they offered us an L shaped plot surrounding their large pole hangar. Our buildings were shot, and the plane tie-downs required taxiing through mud (not feasible for the planned newer retractable gear aircraft). So, we mutually benefited from their offer, even though it meant *much* work. Ken Vandergrift, a great resource for us, had equipment suitable to tear down the old buildings. Ken did this in exchange for the scrap value of the 4 chassis. What a deal!

Phase 4

Phase 4 started with ground leveling and pier building at the new site. Scott Minnucci, a construction unit leader, handled arrangements - including heavy equipment needs, and along with his crew finished the set-up and utility connections over a 6 month period. Before long, we were in our new home! CAP aircraft tie downs were located in back of our new facility, adjacent to paved taxiways - a big improvement! Cadets painted the replacement buildings. Electrical, heating, and air conditioning were installed. Sanitary needs were met using a portajohn. Landscaping and sidewalks were placed. Both the flying club and CAP are indebted to the many individuals who assisted in providing and preparing this facility.

By now there had been several squadron commanders, and Carol Blineberry led the squadron in the early 2000 time period.

Hangars

The club's original accommodations for the planes were tie-downs outside on blacktop (*refer to Figure 2*). As we purchased more high value, newer aircraft we wanted better protection for them. Also, several members used the planes for business, and without inside shelter, airframe snow and ice often prevented winter departures.



Figure 24. Mark Dubowe and Eric Gertz waxing N1287C in Hangar D10

The flying club's first hangar was obtained circa 1986, and it housed our second Mooney - N5752E. It was a corner unit, D10, giving us extra space for maintenance activity and storage. We pre-heated engines electrically, and did winter maintenance with the aid of a space heater. A ceiling tarp caught condensation, and bright fluorescent lights provided adequate illumination. The drawbacks to this hangar were a north facing sliding door which frequently iced up, and a narrow tail slot requiring pilots to be *very careful* when pushing the plane back into the hangar (in order to avoid tail damage).



Figure 25. N907MM in front of Hangar H2

One of our first brand new planes was Grumman N907AP. In anticipation of its arrival in 1990, the club negotiated to obtain hangar H2. This corner hangar was very large, included extra corner work space, and had more modern sliding doors which alleviated some of the winter problems. Further, the tail area was very wide, making hangaring easy and less hazardous. The delays in delivery of

our new Grumman allowed us to hangar Tiger N4524M during its last month's service with us, and we now had total hangar protection.

With the purchase of our third Cirrus, N1287C, in September 2003 we faced a new dilemma. The Cirrus tail was wider than the Mooney's tail, and the new Cirrus was too large for hangar D10. Even though the larger hangars were more costly, we tried to arrange a hangar trade but had no success. Needless to say, there was no way we were going to leave a new \$190,000+ plane out in the elements. We approached the Airport Authority for permission to widen the D10 hangar tail area. A similar request had been previously approved on another duplicate hangar. Fortunately, we had Scott Minnucci and Joe Lynch as members - both are construction experts, and Joe's specialty is hangar building. An architect drew the plans, Joe purchased the steel beams, and oversaw the project. Three months later, mission accomplished! N1287C now was protected in its new home.

To summarize, the 907th Flight Squadron now has great hangar facilities at a reasonable cost, and the facilities are convenient and easy to use. This adds a lot to our appeal to an incoming member.

Appendix F: Vendors – Past and Present

The following vendors have contributed to the club's continuing success - most have consistently performed above and beyond expectations to assure safety, fairness, and timeliness. All have provided assistance and support when needed - WE THANK THEM!

ARC Radio	A Morristown, New Jersey radio manufacturer. Their grass strip was visited frequently in support of the radios in our early Cessnas. Out of business.
Bloomsburg Engine	Lycoming experts who did several jobs for the 907 th . Craftsmen. Out of business.
Bryant Aviation	Jack and Marge Bryant ran a joint business based at Penridge, offering flight instruction (Marge was a gracious, knowledgeable Cardinal expert), charter services, and maintenance.
Flying Tiger	Grumman experts.
Grant Fry	A Pennridge asset - solid mechanic who helped the club on many occasions.
Terry Harrison	A U.S. Air force pilot and A and E mechanic. Instrumental in helping us get started as an organization. Terry was a first class guy with a private grass strip across the river. In his grass strip is where our "basket case" J-3 cub first took wing.
Lancaster Avionics	A great help with today's sophisticated equipment.
Leading Edge Aviation	Our local fixed-base operator (FBO) - Great service, accommodating and timely help throughout the years. Office staff are absolutely the best, and special thanks to Bill Rush and Rick Witt, too.
North East Aero	Bert Betzler and his team (formerly at Lincoln Park Aviation) have played a key role in keeping our SR-20s operational and safe. Trusted experts.
Mattituck Engine	Provided several 907 overhauls – known for quality, reliability, timeliness.
Penn Avionics	Avionics support for the SR-20s.
Quaker Avionics	Located in Quakertown, specializing in transponder and instrument checks, as well as a variety of other repairs and service.
Reading Avionics	A former asset for older equipment repair, located at Easton Airport. Out of business.
Souderton Answering Service	For many years provided top notch scheduling services for the 907 th Flying Squadron aircraft.
Henry Weber	Mooney specialist. Did much to help the 907 th – his expertise was irreplaceable.

Appendix G: Airports of a Bygone Era

The only thing constant is change. Unfortunately, in the current world of aviation, airports tend to close and rarely do new ones open. The following is a list of favorite area airports which have closed in the time the 907th Flight Squadron has been in existence:

- Buehl Field, Woodbourne, PA
- 3M Field, Northeast Philadelphia, PA
- Turner Field, Prospectville, PA
- Montgomeryville Airport, Montgomeryville, PA
- Marlboro Airport, Marlboro, NJ
- Bethlehem Easton Airport, Easton, PA
- Hershey Airpark, Hershey, PA
- Jamesburg Airport, Jamesburg, NJ
- Aircraft Radio Corporation (ARC) Field, Boonton, NJ
- Shannon Airport, Downingtown, PA
- Warrington Airport, Warrington, PA
- New Hanover Airport, New Hanover, PA
- Philadelphia Seaplane Base, Philadelphia, PA
- Warminster Naval Air Warfare Center, Warminster, PA

Appendix H: Airport Restaurant Ratings

The following *subjective* table provides a partial list of favorite “\$100 Hamburger” locations that the members have frequently visited. Note that some may no longer be in business, or conditions may have changed.

Airport Name	Restaurant Location	Food Quality	Service	Restaurant Size
Bay Bridge, MD	Long walk or short taxi ride	Outstanding	Outstanding	Large
Blairstown, NJ	On field	Good	Outstanding	Small
Bloomsburg, PA	Walking distance	Outstanding	Outstanding	Large
Butter Valley, PA	On field	Good	Good	Small
Cherry Ridge, PA	On field	Good	Good	Small
Chester County, PA	On field	Medium	Good	Small
Danbury, CT	Walking distance	Good	Good	Large
Easton, MD	On field	Good	Good	Small
Flying W, NJ	On field	Good	Good	Large
Frederick, MD	On field	Medium	Medium	Small
Hagerstown, MD	On field	Good	Medium	Small
Kutztown, PA	On field	Outstanding	Outstanding	Large
Lancaster, PA	On field	Medium	Good	Medium
Lincoln Park, NJ	On field	Medium	Medium	Small
Loch Haven, PA	Taxi ride	Varies by Restaurant	Varies by Restaurant	Varies by Restaurant
Millville, NJ	On field	Outstanding	Outstanding	Medium
Ocean City, MD	Taxi ride	Varies by restaurant	Varies by Restaurant	Varies by Restaurant
Ocean City, NJ	On field	Good	Good	Medium
Pottstown, PA	Walking distance	Good	Good	Medium
Robbinsville, NJ	Walking distance	Good	Good	Medium
Salisbury, MD	On field	Good	Good	Small
Selinsgrove, PA	Walking distance	Good	Good	Medium
Sky Manor, NJ	On field	Medium	Medium	Medium
South Jersey Regional, NJ	On field	Good	Medium	Small
Sullivan County, NY	On field	Medium	Good	Small
Trenton, NJ	On field	Good	Good	Medium
Williamsport, PA	On field	Outstanding	Outstanding	Large
Wilmington, DE	Walking distance	Good	Medium	Large
Wyoming Valley, PA	Walking distance	Outstanding	Outstanding	Large
York, PA	On field	Outstanding	Outstanding	Small

Appendix I: Flying Club Success

The Flying Club has had a long and successful existence. We believe the following are some of the key factors that have led to that success:

- 1** Active and enthusiastic membership
- 2** Strong officer leadership
- 3** Focus on pilot safety, ongoing education, and training
- 4** Continuous upgrade of our planes, utilizing new aircraft wherever possible
- 5** Internal member financing of aircraft
- 6** Financial stability through conservative budgeting and financial planning
- 7** Performing our own basic maintenance, courtesy of A & P Frank Engard
- 8** Relationship and connection to Civil Air Patrol squadron (group and national, too)
- 9** Support of the Doylestown FBO
- 10** Help from the Bucks County Airport Authority in providing facilities and space
- 11** Good vendor relations and respect
- 12** Prudent, economical purchases of both aircraft parts and services
- 13** Cultivation of our insurance providers
- 14** Utilization of 30 hours/plane per month, with 11-12 members per plane to keep flight rates low



Figure 26 - Scott Minnucci captured the beauty of the Bahamas from N907MM

Acknowledgements

This documented history of the 907th Flight Squadron would not be possible without the hard work and dedication of a large number of contributors.

In particular, thanks to Bill Mount, who not only inspired the idea, but wrote most of the content and provided most of the memories. Thanks to Steve Canfield for organizing, editing, and producing this document, and thanks to Steve's wife Andrea for assisting with the editing. Thanks to Frank Engard, Eric Gertz, and Denny McFadden for their input, review, and research. Thanks to Mark Fischer for researching the FAA Aircraft Registry on the status of our current and former aircraft. And thanks to Vern Schramm for providing photos from the early days, and Eric Gertz for photos from the later years.



Figure 27. Steve Canfield talks about flying with a Cub Scout den