

# PUTTING WINGS ON

## YOUR DREAMS

VOLUME XIV

ISSUE 11



Editor Bert Osborn

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**Submitted by Jim Hudson**  
Membership and Safety Director

### Winter Flying - A Review

It's that time of the year again, temperature and dew point are the same or close to it, we wait for the morning fog or inversion to clear, and if it does we can enjoy the crisp cool air and feel like we're flying a jet fighter- well most of us can dream anyway.

Or we can enjoy a nice clear night to look at the Christmas lights from above.

Winter flying has some great advantages, but as with all seasons there are some things we need to review and prepare for. I've written in the past on this topic, and will refer you to some previous newsletters and articles to review. You can click on the highlighted links to pull up the newsletters.

In the [Winter Flying December 2011](#) newsletter I wrote about Winter flying and some things you should consider and prepare for.

In the [October 2012 Newsletter](#) I wrote more on Winter flying and flying at night. There is a [Night Currency Quiz](#) you could take to refresh your memory on night currency. The links referenced in this quiz are no longer working.

In the [November 2016 Newsletter](#) I talked about Marginal VFR, the type of weather we typically get with inversions that we usually have this time of year. This article has some sobering video's you should watch if you think you think you should venture into MVFR without an instrument rating - or even if you have one and encounter icing conditions.

In the [January 2013 Newsletter](#) the VFR minimums at KMAN and Special VFR. are discussed.

Finally, in [December 2016 Newsletter](#) are some additional tips on Winter flying and some graphic reminders from our own club of things to avoid.

Take time to prepare and enjoy flying this winter. Hopefully we won't have the snowfall in the valley that we did last year. But, if we do, remember that we're a club and it's up to us to keep our hanger and surrounding areas clear the snow and ice.

Have fun, Fly safe and Don't do anything Stupid,

Jim

## T-Craft's new 180 HP C172N



From Jim Hudson:

The annual for 93F has been completed and she has been put into service for T-Craft members.

If you were at the last membership meeting, I reviewed the differences in our new C172 from N4464R and N13686, which are 160HP "M" models. This comparison as well as the checklist, POH, and STC Supplement are on the club web page, under the "Fleet tab"

All members who intend to fly this plane are required to fill out a data sheet and submit to me or one of the club CFI's for review. A new version of the AirPlanes STC POH Supplement has been obtained within the last few days. In the latest version, the restriction on the continuous maximum rpm of 2540 rpm has been removed. The Maximum Continuous rpm is now 2700 RPM. However, operating at this level the fuel burn is in excess of 10 GPH, operating at 2500 rpm will be more efficient, without too much sacrifice in speed. The Weight and Balance sheet has been updated, with the latest empty weight information. All documents are current as of 12/5/2017. The documents presented in the last membership meeting have been revised, and you should download the new documents. If you have completed a data sheet with the older data, no problem, just be aware of the revised W&B (minor change) and removal of RPM restriction. If you have not completed a data sheet, you need to do so before you fly N1293F. N4464R and N13686 are under a different STC and have not changed. There are new checklists for 64R, 686, and 375 to reflect some updates in other areas. I'm working on the C182's - Jim

The following is a report from member Tad Jones (thanks Tad for the Orange Fox artwork) a few days ago. The Orange Fox is super fun to fly! We were getting between 800-1000 feet per minute climb today. That was with me and Lloyd Putnam and full fuel! We were flying into a pretty stiff headwind (13 gusting

to 23) which was a bit exciting but we could land and then take-off again near the 1000' markers...so like 300-500 takeoff roll which was so much fun!

Here is the explanation from the Air Plains Website on the Flap Limitation. It has to do with the increase in Gross Weight. If you were rated to a lesser gross weight then you could use 40 degrees of flaps but the STC requires that it is limited to 30 Degrees since the Gross Weight is increased so it needs to have the limiter to meet the Go-Around requirement.

[Airplanes Web: Why are the flaps limited to 30deg in C172](#) During a go around with full (40 degrees) flaps, the aircraft must be able to achieve a minimum rate of climb at gross weight. At 2500 to 2550 lbs of gross weight the aircraft will not be able to achieve the required rate of climb with full flaps. Note: 172P flaps come from the factory with 30 degree flaps

### December 2017

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

#### Calendar of Events:

No General membership meeting Tuesday, December 26. The next membership meeting will be January 30, 2018.

12/10/2017 – Accounts due  
12/12//2017 - Board Meeting  
12/20/2017 - Accounts past due

If you have any ideas for safety meeting presentations or would like to arrange a presentation, contact Membership/Safety Director Jim Hudson

#### Fuel Reimbursement

\$4.17 per gallon.

#### Articles or Pictures

If you have any pictures or articles for the newsletter submit them to Jim Hudson or Bert

Osborn.

#### Ratings:

15 Student Pilots  
68 Private Pilots  
01 Recreational Pilots  
12 Commercial Pilots  
09 Air Transport Pilots  
32 Instrument Rated Pilots

#### Member Statistics:

105 Members  
16 on the wait list.  
39 Class I Members (39%)  
66 Class II Members (61%)  
18 Members suspended- Inactive (voluntary suspension - BFR/Med/Attend/Billing)  
12 Social Members (non flying, not included in "Members")

#### BFR's

Bert Osborn  
Roland Steadham

#### C182 Upgrade

John Moen upgraded from Class I to Class II status

#### New Ratings

Tad Jones obtained his UAS Remote Pilot's Certificate for flying UAV's  
Bert Osborn - Complex aircraft  
David Blood (wait list member) - Private Pilot

#### New Members

Tim Ferrill

## HATS OFF

A thank you to Scott Marshall and Western Aviation. After the November membership meeting, member Scott Marshall, who is the chief pilot for Western Aircraft gave a presentation. Scott explained that the Boise Western Aircraft was the largest Pilatus dealer in the nation. The Boise operation employees 180 full time employees. The company had sold 15 Pilatus PC 12's last year. They also sell Piper and have a part 91 and a part 135 charter business. Western has a new Challenger 300 jet which will give the company international charter ability and will be taking delivery of a Pilatus PC 24 jet. Scott flew a PC 12 to Nampa with several T-Craft members on board to allow the members to tour the aircraft. Partially because of Scott's presentation T-Craft set a record of 71 in attendance, 67 members and 4 guests,

### Schedule Master - 90 Day Alerts

Three reminder options have been added to Schedule master for Day, Night currency and T-Craft Attendance currency. These are to be used for your convince in getting an alert 30 days before the expiration of the dates they will be due. Student pilots could also use day or night alert for their 90 day solo currency. You can use these options or elect not to use them by checking the "Not Applicable" box. Go to My Account > My Profile > Status tab for these options.

If you would like to use them, the date to be entered is the future date on which they will expire - NOT the date that you last attended a meeting or completed your day or night currency.

For instance, if you were night current on 11/28/2017, you would enter 2/26/2018 in that box, which is 90 days from 11/28/2017. I've noticed some members have entered the date that they attended a meeting or became current. You need to enter the future date.

I have made a one time entry for all members for the T-Craft 90 day attendance. I do not plan to update this in the future, I'll leave that up to you as a member. I'll continue to keep track of attendance and administer the attendance policy as normal, except I'll not be sending warnings that your 90 day date is about to expire. You can use schedulmaster, or whatever means you wish to remind yourself of these dates.

As a reminder, FAR 91.57 on recent flight experience is based on the previous 90 calendar days, not 3 months from your last currency date. There are several date calendars available on-line or apps to make the calculation on 90 days from any given date.

In the Status Tab, you will also see the fields that track your Medical and BFR dates. These fields can only be changed by a board member. You need to provide the club copies of your most recent BFR, Pilot certificate, and/or Medical. You can send me a scan of the document via email, snail mail, or drop off a copy in the club office in order to update these dates.

Let me know if you have any questions,

Membership/Safety Director

Jim Hudson

### This Month's Frequent Flyers

<u>The top three flyers:</u>		<u>The top three aircraft flown:</u>		<u>The top billing aircraft:</u>	
Dale Reese	26.6	13686	62.7	7593S	\$4,640
Hooten Shariat	13.4	75375	43.2	13686	\$4,577
Logan Schwisow	10.1	7593S	40.0	9989E	\$4,122

## President's report on the state of the Hangar

At the November membership meeting President Brandt gave an update on the hangar. Ben reported that we had made the down payment and would be getting engineered drawings which we would take to the city and obtain our building permits. The hangar will have 5 bays and we will use one for our T-Craft plane. We already have 6 people on a waiting list of for the prospective hangar bays. All of the people on the waiting list are T-Craft members.

## The search for the 8th Aircraft

President Ben explained at the membership meeting that we are not really in a hurry to purchase aircraft number 8. Right now we don't have a place to park it and we will probably actively pursue a new aircraft in the late spring. After polling the membership, the aircraft search committee had recommended a 6 place aircraft. A Cessna 206 had been recommended as had a Cherokee 6.

## Basic Med

What documents does T-Craft Need for Basic Med? We have Six members who have obtained completed their Basic Med requirements.

1. We need the AOPA Basic Med Course Completion Certificate,
2. The Physician's Signature and Declaration page from the Comprehensive medical Examination Checklist,
3. Copy of your Driver's license showing the expiration date.

## WINTER HEATING RULES

Heaters & power cords are out. Next time you arrive at hanger to fly and you have layers of clothing to stay warm, please remember that your aircraft is also cold. There are two (2) power cords per aircraft. One power cord for oil sump heater & another for the small heater on chair. Please leave heater on chair. Usually takes a good 30 minutes to take some chill off engine & surroundings. Except for 64R, which has oil sump heater plug located in left nose air intake, the other aircraft have a plug located near oil dip stick tube. This should have been pointed out to new members during your walk-a-bout introduction to the aircraft/hanger and certainly during your aircraft checkout. If not please get with another member to help guide you. Taking care of an engine now will give us longer engine life. Please read "[Cold Weather Operations](#)", and a related article [Why you're more likely to have an engine fire this fall](#) on our web site in the site index.

Thanks. Safe enjoyable flying. DOM

## HOURLY RATES



N67375  
\$60.00



N4464R  
\$71.00



N13686  
\$73.00



N1293F  
\$85.00



N1891X  
\$106.00



N9989E  
\$112.00



N7593S  
\$116.00

## SQUAWKS

James Eyre, Director of Maintenance.

**13686** - Two Garmin G5's have been installed. The defective G5 used as the directional gyro has been replaced and is functioning correctly.

**9989E** - The Garmin G-5's have been installed. We need to order center plastic console which could be installed when available. 89E had its dual shoulder harnesses installed. The cargo latch had been repaired and 2 Garmin G-5's had been installed. The vacuum pump has been removed. The suction gauge is also gone. The inertial reel had been removed and will be replaced.

**91X** -Has been mothballed until February. The engine will be removed and rebuilt. Mike Metcalf will install the upgrades as time permits. All upgrade parts have been ordered and received. There was discussion about whether or not a pilot would need another check out in 91X after it is upgraded. The feeling expressed was that when we fit the new larger tires on 91X it will be squirrely and a check out may be required.

**93S** - 93S has an oil leak. We are not sure where the leak is, but we are looking at it.

**64R** - Yes we have replacement panel. It is a **solid piece** of plastic which will need the **exact** placement of holes to accommodate switches, etc. **Anyone very proficient with using a dremel?** Involves removal of switches requiring inspection and approval by A&P/IA. Do we want to tackle this project or put it into hands of Aero Services? Must factor in down time. ?Winter project?

**67375** - During the 100 hour inspection, 375 had a leaking crankcase seal replaced.

Remember to report squawks on schedule master. The old clip boards for reporting squawks have been retired.

## CARE OF YOUR AIRCRAFT

Please remember that after landing club policy requires us to clean the leading edges and the windscreen of bugs and foreign debris. There should be no need for any such requirements. As a matter of common courtesy we should leave an aircraft in a clean condition after we have flown it. We learned as early as first grade, if we create a mess, we clean it up. That's the grown up thing to do. PLEASE, after you land, clean the bugs off the leading edges and windscreen. Then use the furniture polish on the leading edges.

## MEMBERSHIP DUES

Effective February 1, 2016 membership dues were established at \$60.00 per month. At the Annual meeting this year membership approved continuing dues at the rate of \$60.00 per month. That rate combined with the low hourly charges for the airplanes made available because of the well timed fuel purchases and the great maintenance under the watchful eye of Maintenance Director Jim Eyre makes T-Craft the leader in high quality, low cost flying. Upgrades will not impact the hourly cost of flying an aircraft.

### PLEASE REMIT PAYMENT IN FULL BY THE 10TH OF THE MONTH.

Your account will be PAST DUE if not received by the 20th and there will be a \$10.00 late fee. There will be a finance charge if your account is over 30 days past due and flying privileges will be suspended.

## **OFF FIELD FUEL REIMBURSEMENT**

If you purchase fuel off site you will be reimbursed at the club rate per gallon, currently at \$4.17 per gallon. In order to get the reimbursement, send your receipt(s) to the club mail address to the attention of Reggie Sellers, or scan a legible copy and email to Reggie Sellers. **DO NOT** put your receipt in the club pouch, these are for Nampa fuel receipts only and your personal receipt will probably get lost.

Remember. You use your credit card to purchase your fuel offsite. Submit the bill to Reggie and he will give you property credit.

## An Aircraft Slides Off A Slick Runway: How To Avoid The Same Mistake On Your Next Flight

- By [Swayne Martin](#)



Now that winter is here in many parts of the country, it's time to start paying extra attention to runway conditions. A contaminated runway plays a significant role in your ability to slow down, stop, and even maintain control during landing.

### The Accident

The following NASA ASRS report from early 2017 tells one pilot's story of an encounter with a contaminated runway...

I listened to the ATIS information, then checked in with approach control, and accepted the plan to shoot the RNAV Runway XXL approach, with a circle to land Runway YYR. At this point the visibility was 1 1/2 miles with a ceiling of approximately 1,200' overcast. Approach control vectored my aircraft for the Runway XXL approach. The aircraft was in IMC conditions throughout the descent and approach. It began picking up light to moderate rime ice. Approach handed me off to tower inbound on the Runway XXL approach.





I checked in with the tower. Tower informed me that the ATIS changed and that the visibility was reduced to 3/4 mile. I requested to continue the approach to straight in Runway XXL. The tower cleared us as such. No mention of runway conditions were given by the tower. I descended on the approach, and saw the airport lights and runway environment at the MDA. Being in a position to land, I continued down to the runway. I was using an extra 5kts of speed on approach due to residual ice on the aircraft. I believe that touchdown occurred somewhere in the first 1,500 feet of the 3,200 foot runway. Upon touchdown, I realized the braking action was nil and that the aircraft was sliding. I was aware that it had been lightly snowing at the airport, but was not aware the runway had not been plowed or treated in any way, and was not offered any information to that affect. I maintained directional control of the aircraft but ran out of runway surface by about ten feet, striking a runway end light. I was able to taxi the aircraft to the ramp without further incident. The aircraft's props were damaged. No other damage was known at the time of this report.

When does the ATIS include runway condition reports?

When airport operations conducts a braking action test, they issue a NOTAM for the braking action. And as soon as tower gets that, they'll include it on ATIS. Until then, there might not be any runway condition information on the ATIS.

When you're picking up ATIS, you'll hear something like this: braking action 5/4/2. But what does that mean? If you look at the chart below, it means the braking action for the runway is good at touchdown, good to medium at the midpoint, and medium to poor on the rollout. When you see braking action numbers, the bigger the number, the better the braking action. The scale is from 0 to 6. 0 means nil braking, and 6 means dry runway normal braking action.

# The FAA's New Braking Action Reports

Assessment Criteria		Control/Braking Assessment Criteria	
Runway Condition Description	RwyCC	Deceleration or Directional Control Observation	Pilot Reported Braking Action
<ul style="list-style-type: none"> <li>Dry</li> </ul>	6	---	---
<ul style="list-style-type: none"> <li>Frost</li> <li>Wet (Includes damp and 1/8 inch depth or less of water)</li> </ul> <p><b>1/8 inch (3mm) depth or less of:</b></p> <ul style="list-style-type: none"> <li>Slush</li> <li>Dry Snow</li> <li>Wet Snow</li> </ul>	5	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
<p><b>-15°C and Colder outside air temperature:</b></p> <ul style="list-style-type: none"> <li>Compacted Snow</li> </ul>	4	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
<ul style="list-style-type: none"> <li>Slippery When Wet (wet runway)</li> <li>Dry Snow or Wet Snow (any depth) over Compacted Snow</li> </ul> <p><b>Greater than 1/8 inch (3 mm) depth of:</b></p> <ul style="list-style-type: none"> <li>Dry Snow</li> <li>Wet Snow</li> </ul> <p><b>Warmer than -15°C outside air temperature:</b></p> <ul style="list-style-type: none"> <li>Compacted Snow</li> </ul>	3	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
<p><b>Greater than 1/8 inch(3 mm) depth of:</b></p> <ul style="list-style-type: none"> <li>Water</li> <li>Slush</li> </ul>	2	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
<ul style="list-style-type: none"> <li>Ice</li> </ul>	1	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
<ul style="list-style-type: none"> <li>Wet Ice</li> <li>Slush over Ice</li> <li>Water over Compacted Snow</li> <li>Dry Snow or Wet Snow over Ice</li> </ul>	0	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil



What will the tower tell you?

If you ask tower for a braking action report, they're not going to use the numbers. They'll stick with the words that describe the braking action: good, medium, poor, and nil. The word "fair" has been tossed out the window, per new guidelines established in 2016.

Even if a runway condition report is NOTAM'd for the airport, the tower is not required to give you a conditions report over the radio. It's your responsibility to listen to the full ATIS and obtain this information yourself. This is one reason that ATC always verifies with pilots that they have received the correct and updated ATIS information. If conditions are rapidly changing and the ATIS isn't representative of the true conditions, tower may give you updated runway information directly. Again, this is at the tower's discretion and is not required. If you're unsure of the conditions or have a question, it's always best to ask.



### Landing Fast And Long

The pilot in the accident flew a faster than normal approach to the runway due to ice accumulation, which was a most likely a smart choice. But the landing problems also started there. When you fly a faster than normal approach, you're more likely to float and land long. And when you touch down faster than your touchdown speed, you need more runway to stop.

Couple the landing point, longer required rollout, slick conditions, and a 3,200 foot runway, and it was the perfect recipe to end up off the runway.

### What If It Happens To You?

If you're faced with a slick runway, or you're flying faster due to ice buildup on your airframe, there are a couple things you can do. First, pick a landing point closer to the runway threshold. In normal situations, aiming for the aim point markings (1,000' down the runway) is usually a great idea. But if the runway is slick, give yourself more time to stop. The 500' markings are a good place to start. And if your runway doesn't have 500' markings, the second centerline stripe is a good approximation. That extra 500' of stopping distance can make a big difference.



### Maintaining Directional Control After You Touch Down

When you touch down, maintaining directional control should be your first priority. Use aerodynamic braking to slow down, and use small rudder inputs to maintain the centerline. Over-controlling the rudder could cause you to slide and lose directional control.

On slick surfaces, your brakes are going to be much less effective, and they can quickly get you in trouble. Initially after touchdown, use little to no brakes. Then, gently press them to feel their effectiveness. It's easy to get anxious and jam on the brakes, but that can easily lock up your wheels. And when that happens, your braking effectiveness decreases, and you can start sliding. The more gentle you are on the brakes, the easier time you'll have maintaining directional control on the runway.

### Your Last Resort: Go-Around

If you have enough runway and braking/directional control is clearly a problem, going around even after touchdown is an option.

During a go-around, adding throttle increases airflow over your tail, and you'll most likely have better directional control on the ground with the rudder (even considering left-turning tendencies). If you feel like you're not going to maintain control on the runway or stop in time, go-around, lift off, and execute your Plan-B. That might be making another attempt at the airport, but it might also mean flying to another airport with better runway conditions.

### Preparing For Less-Than-Ideal Landing Conditions

Next time you fly, pay attention to the runway conditions. We're just entering the season for slick runways, and if you're not prepared, you can find yourself in a lot of trouble, in almost no time at all. Know the runway conditions, give yourself enough runway to stop, be gentle on the brakes, and fly your airplane all the way to the taxi turnoff.

# Flying through time

NOVEMBER 12, 2017 BY SPARKY BARNES SARGENT

Ryan Lihs of Sioux City, Iowa, is an enthusiastic-yet-humble sort of aviator. When he flew his handsome black-and-gold biplane to Antique Airfield for the 2017 Antique Airplane Association Fly-In in Blakesburg, Iowa, this past Labor Day, numerous admirers were irresistibly drawn to it. He happily shared the history of his 1929 Pitcairn PA-6. In fact, he enjoys doing that almost as much as he does flying it — and he did plenty of both during the fly-in



Photo by Jack Fleetwood

Ryan, 37, has owned a J-3 Cub for about 10 years, which whetted his appetite for a real antique.

"I looked at a lot of Waco F-2s, but I love the history of Harold Pitcairn and the [Pitcairn Aircraft Company](#), so I knew that this PA-6 was the one for me," he said with a smile. "I've got a lot of historical pictures and information about it, which David Pitcairn helped me put together. 214H is the oldest PA-6 flying; George Jenkins of Eagles Mere, Pennsylvania, also has a PA-6, NC548K."



Ryan first heard about the PA-6 from Ben Taylor of Antique Airfield and Dallas Grimm of [Redline Aviation](#).

“I called David Pitcairn and learned more about the aircraft,” recalls Ryan, “and then I flew to Pennsylvania for a week, met Mike Posey and stayed with David Pitcairn. I learned everything that I could from them.”

According to aircraft records, 214H (s/n 39) rolled out of the Pitcairn Aircraft Company on May 31, 1929. It had a 220-hp Wright Whirlwind J-5-C engine, an inertia starter, and an adjustable steel propeller.

Instrument boards included a tachometer, altimeter, compass, oil thermometer, gasoline gauge, bank and turn, airspeed, clock, oil pressure, and rate of climb indicator. It was also equipped with a first aid kit, fire extinguisher, and safety belts. 214H was outfitted with extra equipment, including a map pocket, pilot's DuPlate glass windshield, cockpit heaters, and a crash pad on the passenger's instrument board.



Photo courtesy Ryan Lihs

The PA-6 went through numerous owners throughout the years and, as was common back in the day, a few mishaps as well. In early 1933, Raymond de Voyes of Adirondack Aerial Advertising Company bought the biplane. A banner towing device was installed, but was later removed when the PA-6 again changed hands.

Fast forward, and by 1995, NC214H had become part of the late John Desmond's Heritage Aircraft Collection at Chalfont, Pennsylvania.

"Desmond's mechanics and Mike Posey restored this airplane over the years," Ryan said. "Mike and his brother, Larry, finished the restoration in 2015 and I purchased it in 2016. Most of the instruments are original to the PA-6 model. We also put a GPS, radio, transponder, starter, and battery in it."



The aft cockpit.

#### Crop Dusting

Ryan and his PA-6 share something in common — they both know what it's like to fly low over farm fields. In 1945, NC214H was converted into a crop duster. A hopper was installed just aft of the fuselage gas tank, along with an adjustable air foil under the fuselage, and a wind-driven agitator was mounted on the right wing. The PA-6 also had a metal turtle back fairing and a tail wheel (instead of the original tail skid) then. The dusting equipment was removed from NC214H and a front seat was installed in 1949.



Photo by Sparky Barnes Sargent



If the hands of time were turned back, it could have been Ryan flying the PA-6 when it was plying the skies as a crop duster. That's because Ryan, who started flying at 14 and soloed at 16, started spraying crops in a Piper Pawnee at 20.

He owns and operates his own aerial application business, Redline Aviation, with the assistance of his wife, Ashley.



Ryan and Ashley Lihs with sons, Austin, 3, and Aaron, 8. (Photo courtesy Dallas Grimm)  
Ryan still operates with his first ag plane, a Cessna A188B, as well as a turboprop AT-402 Air Tractor. He's also type rated in Beech jets. Of his 10,000 hours total time, he has around 7,000 hours tailwheel time.

So his career neatly dovetails with his passion for the antique Pitcairn biplane and one facet of its history.

#### Pitcairn Aircraft

Back in the late 1920s, Harold Pitcairn founded Pitcairn Aircraft Company in Pennsylvania. The company manufactured several Mailwing models — including the PA-5, PA-6, PA-7 — to fly cross-country air mail routes for the United States Postal Service. Pitcairn Aviation (which later became Eastern Air Transport) had Contract Air Mail Route #19 from New York to Atlanta.

The Pitcairn PA-6 Super Mailwing and Sport Mailwing biplanes were both on Approved Type Certificate No. 92, dated December 1928. The Super Mailwing was configured with a pilot cockpit and a large mail compartment, while the Sport Mailwing could carry two passengers in the front cockpit.



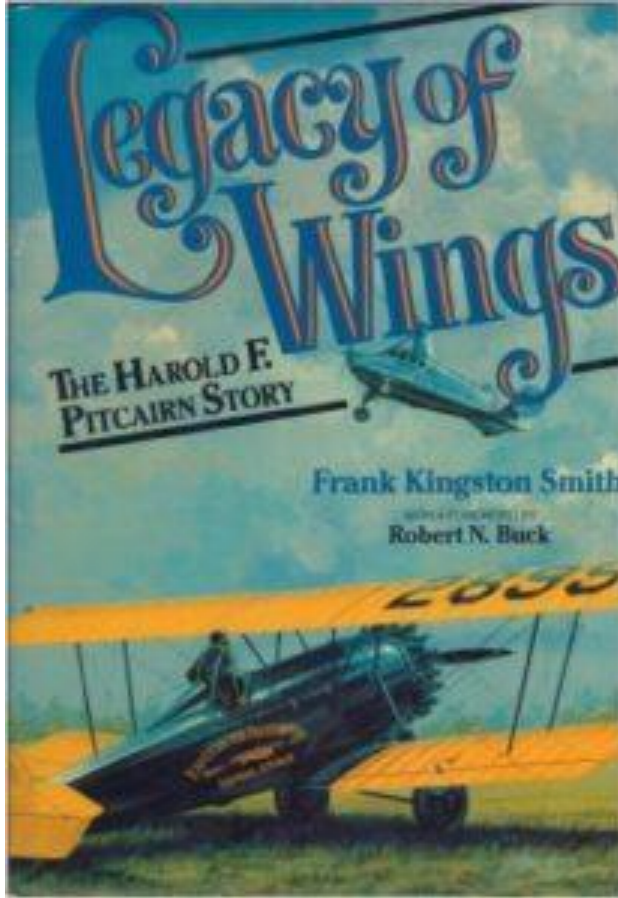
The Mailwings quickly gained a good reputation in the air mail industry. Since pilots flew in extremely adverse weather conditions, the Mailwing was designed to be inherently stable in flight. The fuel tank was built into the fuselage instead of the upper wing as most biplanes of the era, which allowed the wing to be more aerodynamically efficient.

A mail compartment was in front of the pilot's cockpit, and the PA-6 had nearly twice the mail cargo capacity of the PA-5.

The fuselage was built of square section steel tubing for extra strength to protect the pilot in the event of a crash, and the pilot's comfort was enhanced by a windscreen and adjustable seat. Additionally, the horizontal stabilizer was adjustable in flight.



The Pitcairn has a long zipper on the fuselage, which provides easy maintenance access. “One unique feature of the PA-6 is the zipper on the side of the fuselage, which allowed easy maintenance access,” Ryan said. “That was a priority for mail operations. The engine controls and fuel lines could be disconnected, and the entire firewall forward, including the oil system — called a Quick Engine Change system during World War II — could be removed and replaced.”



“Harold Pitcairn bought 214H in 1943 so that his son, Steven, could fly it around the country building hours for his airline pilot career with Eastern Air Lines,” shares Ryan. “A photo of Steven Pitcairn and the airplane is in ‘Legacy of Wings – The Harold F. Pitcairn Story’ by Frank Kingston Smith.”

Pitcairn sold the ship in 1945. In 1946, it was purchased by Paul Mantz Air Services of Burbank, California.

“214H was owned by Hollywood stunt pilot Paul Mantz, and in 1947, he flew this airplane in the movie ‘Blaze of Noon.’ Two PA-7 Mailwings were also in that movie — NC54W and NC95W. All three airplanes were used for one scene at the end of the movie, and you could tell every time you saw 214H,” elaborates Ryan, “because it has the forward exhaust and the square wingtips, where the PA-7s had rear exhaust and rounded wingtips.”

Mantz sold the PA-6 in 1948, and it returned to the East Coast.



The PA-6, as it appeared for its role in the movie “Blaze of Noon.” (Photo courtesy Ryan Lihs) Keeping History Alive

In less than six months of ownership, Ryan has logged more than 100 hours in his PA-6. Quite naturally, along with that flight time comes a bit of upkeep, such as learning the intricacies of care and maintenance for its 235-hp Wright J-6-7.



A Wright Whirlwind powers the PA-6.

“I think it’s like most round engines. They all have their quirks. Mike Connor of Georgia did the overhaul on the engine, and I’ve been told he’s the best by all the Wright engine guys,” Ryan said. “I think the airplane’s not an ‘everyday flyer,’ due to it being so rare. Brent Taylor, president of the Antique Airplane Association, told me, ‘if you fly it, you will work on it.’ And he’s right.”

“But I do not want to park it,” he adds with a smile. “I want to fly it on special occasions and to fly-ins. I know I have to keep current in the aircraft, so I have to fly it!”



Photo by Sparky Barnes Sargent.

Ryan says the PA-6 cruises “at about 120 mph indicated airspeed.”

“I’m pretty green around the edges on flying antiques, but to me, it’s a very stiff airplane,” he says. “It goes straight and level like you can’t believe, but if you want to turn the airplane, it takes a lot of power at the higher speeds. At the lower speeds, it flies great, but at the higher speeds, the aileron input is very tough to me. Some other people have flown it and say it’s pretty common for airplanes of that era. It’s a very stable airplane and climbs out real well.”

“The history is so neat to me — it’s almost more fun than flying the airplane!” smiles Ryan.



Now that the warm flying season has passed, Ryan plans to display his PA-6, along with its accoutrement of historical documents, at the Mid America Museum of Aviation and Transportation in Sioux City, Iowa, for the winter.

Ryan is not only fulfilling his dream of owning an antique biplane, he's also adding a new chapter to aviation legacy. His 1929 PA-6 is a flying tribute to Pitcairn Aircraft Company and Pitcairn Aviation, and also to the modern-day men who so beautifully restored it to award-winning status. NC214H was the Grand Champion Antique at the AAA/APM 2017 Fly-In.