

STARTLING STORK STATISTICS

The prestige of the Aero Service dopesters was dealt a telling blow on April 30, when the stork delivered a baby boy to a field crew member. History relates that this has never before happened and should have special mention. The lucky couple are Fos. and Polly Thomas with the newcomer being named T. Foster Thomas, 3rd. Unfortunately Fos was eating dust in Garden City when the stork dropped in for a chat with Polly here in Philly. The score at the Thomas house is now one and one. A very nice start, we would say.

The abovementioned dopesters were just recovering from the damaging blow with the story that there is an exception to every rule, when on May 6, they went down for the count. The visit this time was to the Harvey Wheelers also in Philly, and, as Harvey is a laboratory employee, tradition dictated a boy. In this case, however, the father was on hand and he also went down for the count when the doctor announced, "IT'S TWINS!" When Harvey was finally revived, he learned it - or they - were twin girls, one 5-1/2 pounds and the other 6-3/4. We are happy to state that Mrs. Wheeler and the girls came through the event in much better style than did Papa. Twin A has been named Jan Brandon while twin B will be known as Jo Blythe. It is not hard to imagine H. W.'s look of bewilderment and amazement as he gave out 2 cigars each to the awe-inspired, well-wishing gallery when he came to 1612 on Monday morning. The Wheelers' complete surprise can be easily visualized upon learning that no one, not even the doctor, expected twins until after the first child was born. The score at the house of Wheeler is now one and two. A very, very nice finish, says Harvey. This puts the Harvey's in second place in the quantity race with 3, just behind the league-leading Kauffmans who have 4.

The announcement from Fos. Thomas giving us the glad tidings indicated that Fos. was a bit excited even though he is 2,000 miles away. It read as follows:

"Am pleased to announce that Polly gave birth to an 8 lb. boy on May 30 - it being, I believe, the first male child born to any crew member while with A. S."

His apparent excitement can be detected by the date. The card arrived in Philly on May 4th or about 26 days ahead of the date of birth. Be that as it may, we extend the congratulations of the entire company to the Wheelers and Thomas.

Since our last issue there have been numerous crew changes as to location as well as to crew members. On the 11th of April, Bob Jefferson flew #5 into Pitcairn Field followed by Bill Burgess in Cessna #10 on the 12th, and on the 13th, Steu Reiss brought #11 in. Also on the 13th George Stuebing and Clarke Smith returned from Garden City by train. Just to complete the "Old Home Week" atmosphere, Helen and Mac McCormick dropped in at 1612 on their way from Winston Salem to New York City, dragging their trailer behind them. Needless to say, things were humming in the office and a great deal of ground flying was done. George and Clarke had many wild tales to tell of life in Garden City, where 4 A. S. crews and not too much flying weather were stationed. Paul Crause chose to drive Mrs. C. (La Verne) home to Pine Bluffs, Ark., instead of joining the convention in the home office.

When the dust had cleared, we found that Bill Burgess had returned by train to Richmond, Va., to rejoin Margie; and Helen and Mac McCormick had pushed on to N.Y.C., both to await further orders. On the 16th a search failed to show any trace of Clarke Smith and it was learned that he had V-8ed his way to Omaha to join his boss (Mrs. S.) and also to dust off the new Beech which was stored in Omaha. Steu Reiss went to N.Y.C. and made several trips to Washington where the Mrs. and son Bobby were staying.

For about two weeks practically nothing happened. Then on the 28th, Ray Kuser and Tom Moore finished their T.V.A. work and Ray came to Philly while Tom and Mrs. M. went home to Chattanooga. On May 1st, Paul Crause joined Clarke Smith in Omaha to do a pipe line job in the Beech and then on May 6th this crew, #12, went north to Pierre, S. D., for some work in that area. The Garden City gang pulled stakes about the second week in May when McCoy and Swan changed base to Spearfish, S.D.; Bullock and Baird went to North Platte, and Thomas and Scott remained in G. C. to mop up the remaining reflights. Jack Swan was well pleased with his transfer to Spearfish as you will recall Mrs. Swan has been waiting there for him for some two months. On May 4th Ray Kuser again took off in #2 and headed north to Burlington, Vt., with Bill Bohan as photographer to undertake some high altitude work. A few moments after

their departure, Steu Reiss headed for Omaha in #11, stopping en route for the family in Washington.

Win and Ann Lippincott left Garden City about the middle of April and proceeded to Milford, Utah, where they picked up the Company station-wagon and the field survey equipment. Lipp will continue the field control work on the Utah contract that Ed. Schuch started last fall. Lipp will have a few mountains to climb and some rather rough country to go over before locating some 95 triangulation points, thus completing the job. While in Cedar City, Utah, the other day, Lipp found two horned toads which he air mailed to the keeper of the Aero Service ZOO, Joe Masino. The toads arrived in good order and now are holding the spot light in the Brock Building. With Joe's friends in many parts of the country, there is no telling just what they will send in next.

To complete the Spring reshuffle of personnel, Clarence and (Mrs. Slack) and Tom Hasset left Philadelphia on May 5th for Omaha. While Tom and Clarence will be missed on the Philly noon hour alley base ball teams, they will, nevertheless, be useful in Omaha on the bowling team.

As each crew has landed at Pitcairn Field, they have been pleasantly surprised to see a camera repair and maintenance room in the company hangar. Their eyebrows are raised in utter amazement to learn that there is on hand, at all times, a camera expert waiting to make quick repairs as the cameras come in from the field. This expert is Eric Rondum, who is fast learning all about the 9 x 9's. Eric has studied these cameras from handle to shutter and feels quite at home now when he is completely surrounded by screws, lenses, gears, etc. He is making an effort to put and to keep each camera in good working order, and therefore would appreciate hearing from you photographers as to your ideas on how to improve the camera and how to eliminate future break-downs.

You all will be interested to learn that a sufficient number of employees joined the group life insurance plan to put it into operation. Therefore, all those that signed up for the plan are now covered and will have the monthly deduction made from their pay checks. The insurance company will shortly send you individual policies and thus complete the details. If there are any further questions, do not hesitate to ask.

Undoubtedly, you all have read about the recent inspection tour of Langley Field laboratories made on May 2 by Washington big shots, including Colonel Lindbergh. Two things brought out during this tour, however, failed to get much space in the press. For your interest and information, therefore, we give you the following:

"Two developments of outstanding importance are reported by the NACA. One is the reduction of air friction on airplane wings. Air friction causes practically all the drag of an airplane wing in high-speed flight, and acts in a thin layer (boundary layer) sliding over the surface. This layer slides either smoothly or roughly. The smooth or laminar boundary layer slides very easily, but the turbulent boundary layer causes friction on the wing surface many times greater than the laminar layer. Even on the best airplane wings in use today, with very carefully smoothed surfaces, the change over from smooth laminar flow to turbulent flow occurs near the leading edge of the wing and this effect, called transition, places most of the wing surface in the drag-producing friction of the turbulent boundary layer.

"Cause of this transition has long been one of the most baffling mysteries in the field of airodynamic research but the NACA has now discovered methods of delaying the transition from smooth to turbulent, thus reducing markedly the air friction on wings in flight. New wing forms have been developed based on previously interested theories as to the causes of the transition effect, and boundary layers on these forms have been found to remain laminar 'over almost the entire wing surface,' considered an achievement with untold possibilities. In this way, air friction has been reduced to levels never before expected.

"Second most important pertains to the overcoming of the effect of shock waves which have limited the speed of the fastest types of airplanes. With air-craft being designed today to fly 400 to 500 mph, it is necessary to examine very carefully the external form - wings, fuselage, engine nacelles, propellers, wind-shield - to determine at what point the air velocity over any part of the craft may reach or approach the velocity of sound. When the velocity of the air over any part of the airplane reaches the velocity of sound, a phenomenon known as the compressibility bubble, or shock wave, occurs, resulting in a very large increase of drag. Since it has to speed up to get past local protuberances such as windshields and cowlings, local flow speeds may reach this critical value on airplanes going little more than

resulting shock wave is an effective brake, preventing any appreciable increase of top speed - even with double or triple the engine power. A new design of NACA cowling delays the onset of shock waves and thus overcomes the difficulty (although the previous NACA design for cowling was nearly perfect for speeds up to 250 mph.) New forms of windshields and propellers have also been developed and now the NACA believes it will be possible to achieve top speeds in level flight exceeding 500 mph without the occurrence of this drag creating compression shock."

The following will clearly indicate how rapidly the top speed of modern airplanes is being increased.

"A reliable source reveals that the new bomber built by Glenn L. Martin Company for the April competitions exceeds by 40-mph the Curtiss P-40's of which the War Department has just ordered a large number.

"While the actual speed of the Martin bomber is not known, it is between 375-mph and 400-mph and evidently is closer to the latter figure than the former, since the P-40 is rated at about 350 mph.

"The old pursuit vs. bomber controversy is due to be revived again. From 1932 to 1935 the Martin bomber excelled in speed any pursuit ship in service. With bomber developments falling behind in 1935, due to lack of orders the pursuits went into the lead. Today the bombers are back in top form and apparently are running rings around the much-touted fastest pursuits. The present stir in the War Department may result in a general revamping of the whole re-armament program. Some top officials believe all bombers should be above 400-mph speed and no pursuits should be ordered if they can't reach 450 mph. Meetings in Dayton next week will decide on bomber orders."

(In case you don't know it, the P-40's referred to above, are the latest and fastest pursuit ships now on order in the U. S.).

Still one more thing of current interest brought out during the Langley tour is the following note on aircraft engine carburation.

Fuel Injection Given Bill of Health. Results of comparative NACA tests on carburetor engines and the fuel injection method (eliminating use of carburetor) were revealed with fuel injection shown superior to carburetor on every count from fuel consumption to power output, etc. A fuel-injection system was also found to be practicable for use with safety fuels, another advantage over use of carburetors. New safety fuels will be available commercially soon and the NACA believes the fire hazard in airplanes will be virtually eliminated by their use with fuel-injection systems. They will also result in considerable operating economy. (United Air Lines is experimenting with a Bendix fuel-injection system and Jack Frye, president of TWA is understood to have been experimenting with a system of his own design for several years)."

While Ray Kuser and Bill Bohan are doing their new work at 24,000 feet in Vermont, they will also be testing the new Mayo oxygen equipment. The complete equipment was installed in #2 last week and we are eagerly awaiting their reports. Ray probably has had more flying time above 20,000 feet than any other pilot in the Company and should be able to give the new masks a real test as to their aptitude for mapping work.

As a close, we reprint a poem which, we feel, expresses the thoughts of many of us who do not fly:

I want to be a pilot.
I'm trying day and night
To learn the fundamentals,
And do the thing up right.
I've asked a lot of questions,
I'm reading all the stuff
By Jordanoff and Weems et cet.
I've been to Dr. Cruff.

I've hung around the airport
All night and Sundays, too.
I've watched the fellows landing,
And thought what I could do
If I were in the cockpit
With hand upon the stick

And fingers 'round the throttle-
I'd show 'em mighty quick!

I've helped to gas the airplanes
I've dusted off a few
And on the field-man's busy day
I've spun a prop or two.
I've studied navigation,
I've figured speed and drift;
I've learned to read a compass,
I've mastered drag and lift.

I've read the regulations
And memorized the things,
I've bought myself a log-book
And a dozen sets of wings.
I'm fond of aviation;
I'm nuts about the sky.
I'd be a dandy pilot,
BUT I'M SCARED TO DEATH TO FLY!

Thomas Maddock

FLASH!!!!

Ray Kuser and Bill Bohan flew at 24,000 feet on Sunday, the 14th, and reported the temperature of 50 degrees below zero. "Everything in the plane was covered with ice after landing," writes crew #2. We believe this is an all time record low for A. S. crews!

FLASH!!!! FLASH!!!!

As we go to press we learn that John and Ruth Witherow, formerly of A. S., joined the Thomases and Wheelers on Friday when a girl was delivered. No name as yet. This latest addition puts the Witherows in a tie for first place with the Kauffmans, at 4 each.