

THE HOWARD NEWSLETTER

*For people passionate about those
Damn Good Airplanes*



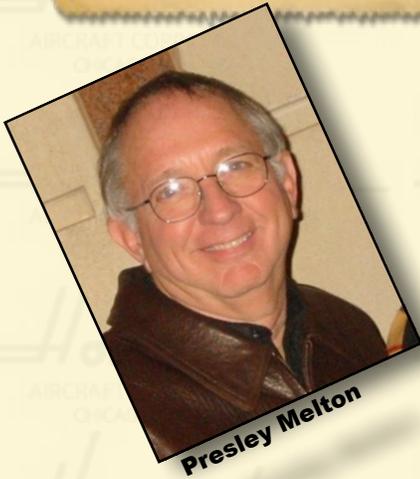
Few can say they use their Howard to better effect than Dale Walker. Shown in this photo is Dale and his Howard DGA-15P on a set of Wesco skis that are wood with a steel wrap around the bottom.

In Dale's words, "They are quite a work of art. I installed high density plastic in the bottom to reduce friction and protect the skis. There is also a nitrogen charged strut which gives extra suspension on rough contortions. It is like taxiing on a pillow! The airplane sits higher on skis than on wheels making the forward visibility very limited until you raise the tail."

"I was able to acquire a set of skis with help from several Howard Club Members. I was able to get the skis, struts, and the Job Master drawings for the installation. I also installed a tail ski which makes the airplane much more controllable on the snow."

The purpose of this flight according to Dale, "I have always wanted to go to the log cabin ski fly in at Doug Wards in Mondovi, Wi. Doug was a belly gunner on a B17 and had gone west a few weeks ago at the age of 94. So I decided to put on the skis and go to his fly in memorial service."

The President's Corner



Presley Melton

More Info on the Autopilot; Our Newsletter; and Some Great News!



NC9125H

Is an approved Autopilot in a Howard a Possibility?

In the November 2017 newsletter I wrote about the possibility of an approved autopilot for Howards from TruTrac in the \$6,000 - \$8,000 range. I was testing the waters to see if there was interest from Howard owners. I received very little feedback, not enough to start pursuing the project.

If you do have strong interest in pursuing an autopilot for your Howard, please contact me via email at PresleyMel@aol.com or my phone 501-519-6800.

For more information about the capabilities of the Vizion and what TruTrak is doing, explore their website: TruTrakflightsystems.com

Newsletter Content

We can't say thank-you enough to Paul Bjornstad for the great job he does writing and publishing this newsletter. I know how difficult it is to compose just my short column each issue and Paul has to fill the other 11 pages.

Please members, submit an article to our newsletter. It can be something historical about Howards, a how-to on a maintenance problem you solved, a story about an interesting trip in your Howard, or even a "Never Again" article. There is probably something you know that everyone else would be interested in

reading. Contact Paul and add some interesting content to our newsletter.

Big News of a Howard given to the Howard Aircraft Foundation

For years the Board of Directors has bounced around the idea of, "...maybe someone would give us a Howard that we could place in a museum somewhere as a tribute to Howards."

Well, that has happened! Through the generosity of Alan Pliska of Torrance, California we have received a gift of Howard DGA N9381H. This beautiful, highly modified Howard was the pet project of John Hewitt of Huntington Beach, California. John went west in July 2017 and Alan became the owner. Alan gave it to us stating, "...this is what John would have wanted."

Elliot Block, Howard Bohl and I visited the airplane at the Chino, CA airport in early January. It is absolutely a "work of art" with a level of craftsmanship rarely seen in an aircraft restoration. John Hewitt purchased it in 1961. I'm told that shortly after the purchase he started "improving" the design and the project continued for the next 40-50 years. Much of the work was done by craftsmen he hired.

Modifications include, but certainly are not limited to:

- Metalized fuselage and all control surfaces
- Added remote controlled doors to access the three fueling caps
- Flush fit all metal surfaces including the baggage door and the fuel doors
- Added a pilot-side door and made both doors hydraulic controlled swing-up opening
- Installed custom wheel pants with trick opening access to air the tires (the covers to the wheel pant access holes are not shown in the photos, but were found later)
- Installed a British 550 HP Alvis Leonides 9-cylinder engine with a three-blade De Havilland prop and a beautiful custom cowl with pilot operated cowl flaps
- Installed a throttle quadrant to replace original push-pull engine controls and custom yokes with Howard logo

<p>President Presley Melton 9 Lakewood Drive N. Little Rock, AR 72116 501-519-6800 presleymel@aol.com</p> <p>Newsletter Editor & Publisher Paul Bjornstad P.O. Box 32 Genoa, NV 89411 901-277-7976 DGA15@me.com</p> <p>Our Website: www.howardaircraft.org is maintained by Elliot Block</p>	<p>The following persons serve as directors of the Howard Aircraft foundation:</p> <p>Presley Melton John Turgyan Mike Vaughan Elliot Block Jim Lund Howard Bohl Ron Spence Roger Brown Trish Volker Paul Bjornstad</p>
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- Installed an electric elevator trim and manual rudder trim
- Installed a modern avionics stack

We understand the airplane took its first flight after modifications in 2013 and has been flown 5-10 hours since then. We were lucky enough to visit with the pilot who flew all the hours and also visited

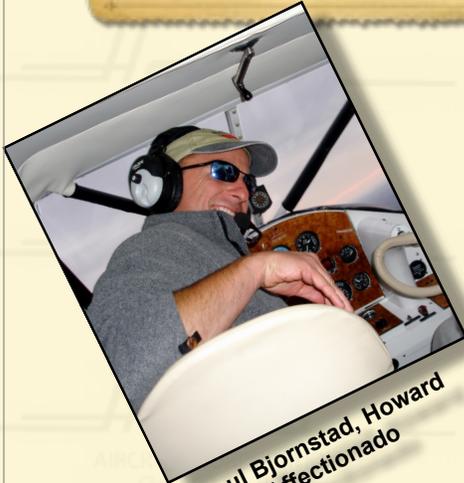
with the craftsman who did most of the restoration/modifications.

The Board of Directors has a lot of decisions to make about the future of this airplane, but we have been given a wonderful gift. The current thinking is to display it on loan to a willing aviation museum, but again – there are some

hurdles that must be crossed before we do anything. One major hurdle is the airplane is certified in the Experimental/Exhibition category. At the moment it is safely stored at Chino.

Presley Melton
President
501-519-6800

FROM THE EDITOR



Paul Bjornstad, Howard Afficionado

I would like to start off by thanking Presley Melton for his very kind words. Those comments and his show of support mean a great deal to me.

The subject of a conversation which Presley and I enjoyed some time ago related to how to make our newsletter better. To distill the entire conversation into a brief point, Presley and I agreed that we needed to continue our efforts to make this newsletter something which will appeal to the Howard members. The newsletter also needs to keep us in touch with each other and with the goings on of our projects, our flights, and the people who are somehow impacted by being a part of this piece of history. We agreed the newsletter needed to be more grounded in the present and in our people.

When one takes a gander at this edition, you will find it rich in historical vignettes and articles. We are fortunate in that regard. The Howard does enjoy a remarkable history and it is fun to read of the amazing world from whence these machines came. I really like that part of the newsletter as well. Seriously, learning Ben's mother was named Francis was a

real kick in the pants for me! However, with all the history, and the cool articles and stories of the 1920s, 30s, and 40s, I felt we were missing something in this edition.

That was the very thing about which Presley and I had talked.

I feel that for this newsletter to truly be equal to its potential, we need to ensure that we, the members of this foundation, are infusing it with the present. We need to hear through our newsletter of interesting things which are occurring today, to our members, in the present.

So, here I am, humbly, imploring you to consider the stories you would like to share. I am confident that there are a great many out there.

Perhaps a simple photo of a Howard flight you recently took wherein the sunset guided you on your last westbound hour. Perhaps there is a story of searching two days for that 9/16 wrench at the end of an annual, only to have a friend bring it back with gratitude for having been allowed to borrow it (ask me how I know). Stories of first flights with youngsters are always welcome and warm the souls of your fellow readers. Working on a Howard project? We



Ol' Smokey

would all love to hear how things are going.

We know the stories are out there, they just have to be heard.

We are all fortunate. Everybody whom I have met in this Foundation has very full lives. That is a blessing. Not surprisingly, stories or photos for the newsletter will not be at the top of anybody's to do list.

However, I ask that you keep the stories in mind. And when life gives you that little window, please send that photo, that story, or that article along. If you don't have the time, please give me a call and I will interview you and be delighted to write your story.

The bottom line is that this newsletter is ours and it is a connection with something we all understand. That something is the bond we share as a group.

So, please, I would love to hear from you...

As would the rest of your fellow Howard Aircraft Foundation members.

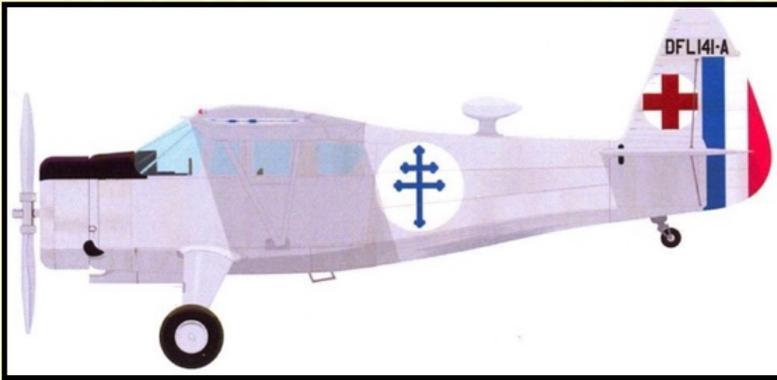
Best regards,

Paul

Our Newsletter

THE HOWARD AVIATOR

Sacre Bleu! En Avion Howard avec Le Forces Aériennes Français Libres!



It is well known that the Howards were present in both the Pacific and the Atlantic theaters during World War II. However, the Howard was also active in the African Theatre with the Free French Air Force. (Le Forces Aériennes Français Libres)

The Howard DGA-15P pictured in the photo to the right is registration number DFL-141-A. The photo was taken in the African Congo some time in 1942. This aircraft was one of three Howards purchased for the Free French by what Charles De Gaulle referred to as "our American benefactors in New York."

The three Howard DGA-15s were essentially the same as the US Navy GH-2s and were utilized as ambulance airplanes in theatre. The three Howards were delivered to the Free French forces in the Congo in April of 1942.

Inasmuch as the Monocoupe was considered to be an inspiration for the design of the Howard DGA-6 it is interesting to note the the Free French also operated 20 of these aircraft in theatre as well. These were exclusively used as Liaison aircraft.

The Free French Forces operated in the African theatre from July 1940 to July 1943.



THE HOWARD AVIATOR

For fighting in the face of difficulties consider the case of Benny Howard, Houston's youngest aviator. He will be remembered as the pilot of the ship that crashed as the San Jacinto Battlegrounds on San Jacinto day last year. The passenger died and Howard was very severely injured. His brother and sister in law, with whom he lives, were strongly opposed to him flying. All his savings and months of labor had been wiped out by the wreck of his plane. An injury to his leg prevented him from going to work. The doctor even told him that he would be lame for life. Rather discouraging, no?

But he was determined to stick to aviation. Insufficient instruction had caused his wreck, so he hung around the other pilots who had more experience. They gave him lessons. Finally, he landed a job of flying a plane from Houston to Roanoke, VA., seventeen hundred miles of swamps, woods, and mountains.

Ten days after he had left a telegram came back; "Arrived Safely, three forced landings. Lots of motor trouble." When he returned to Houston his enemies jeered at him: "Lucky, thats all. He couldn't do it again."

But, persistence wins. Gradually he won back the confidence of the aviation fraternity. He flew different airplanes and

flew them well. His long trip had given him experience, and a good reputation.



Last winter he had an opportunity to make another long trip. He went to Tarko Mo., 175 miles north of Kansas City. It was a small plane that he brought back. Two hours was the limit of flying time on a tank of gasoline. Considering that he fought winds all the way home, this meant about 80 to 90 miles at a hop, then down for more gasoline. Freezing weather gripped the country. In the morning, it would be necessary to break the wheels loose from the ground with timbers. Sometimes, when flying through the mist, the moisture

would freeze on the wires and the propellor, and flight would be almost impossible with the extra load. The radiator had to be covered entirely. Sometimes the motor refused to start. But, he got the airplane back to Houston intact. He proved that the first long flight was not altogether luck.

CC Cannan has a number of planes with which he visits his oil holdings. Howard has been employed intermittently on the planes as a mechanic. Last week he was employed as a pilot and stationed at Stratton Ridge with an OX5 Standard for emergency runs and for the transportation of tools.

His spirit and ultimate success in the face of almost insurmountable difficulties, brings back thoughts of frontier and the never say die spirit of the pioneers.

Benjamin was twenty years old on the 9th of February.

From the Houston Chronicle March, 1924.
 Editorial notes: Though the paper lists Ben Howard's Birthday as February 9th, it is largely accepted that Ben Howard was born on the 4th of that month. Also interesting is how politely the paper refers to his "insufficient instruction."



It is with a sense of sadness and loss that we share the news that Ronnie Rippon flew west on February 1st of 2018. Ronnie will be well remembered by the members of the Howard foundation for his love of all things aviation and his particular love of the Howards. Always committed to helping any foundation members with his expertise, Ronnie's advice was always offered easily and with a smile.

Ronnie Rippon was truly a pilot's pilot who had amassed 35,000 hours of safe flying time in a myriad of interesting aircraft. Professionally, most of his flying time was as a corporate pilot flying in the midwest. Of that, a great deal was flying a Beech 18. Indeed, for a major portion of his corporate career, Ronnie would forgo the jets in favor of the rumble of two Pratt and Whitney 985s.



After he got out of the Navy in 1952 Ronnie determined that he would be a pilot and used the GI bill to get there. Clearly, he loved flying as his start was not terribly auspicious. You see, Ronnie bought his first Howard as a way to make money in aviation. He used that Howard to fly Turkeys! That first airplane was a working machine. It burned a gallon of oil an hour, but it was smooth.

This early association with that Howard DGA -15 created Ronnie's lifetime passion for the Howards. Overtime he would own a great many of the aircraft and have a number of prize winning restorations, including two Grand Champion Custom Classic honors at Oshkosh. Ronnie's passion for the airplane and his exquisite craftsmanship had few equals.

Ronnie Rippon was a major influence the Howard Aircraft Foundation and most importantly, a friend to us all. He will be missed.

Blue skies and tailwinds...

THE HOWARD AVIATOR



Howard's everywhere! This photo was taken at NAS Atlanta on April 15, 1944. NAS Atlanta is known today as the Peachtree-Dekalb Airport in Chamblee, Georgia. The source of this photo is the National Archives at Atlanta.



This photo was shared by Elliot Block. His Howard is shown after a recent washing at its home at the Palomar Airport in Carlsbad California. Taken February 11th, Elliot had just washed her for a flight to Gillespie Field in the San Diego area, from whence the airplane had originally come. Elliot states that he locals were excited to see the aircraft once again.



Pictured is the remarkable restoration of a Howard DGA-15P (NC1785H) by Ken Kreutzfeld. This 1940 Howard is parked inside the Liberty Aviation Museum in Port Clinton, OH in November. The airplane is currently owned by Ken and his brother Jim Kreutzfeld.



Shown here is the internal fuel tank baffling to Paul Bjornstad's Howard, Ol' Smokey. After 70 years of service, the vagaries of age had rendered these tanks only marginally able to retain fuel. The repair work is being done by Loree Air Inc. of Diamond Springs, California.

THE HOWARD AVIATOR



Above is an excellent photo of the Howard to which Presley Melton referred in his President's letter. This very highly modified DGA-15 was donated to the foundation by Alan Pliska of Torrance, California. Very noticeable in this photo is the exquisite workmanship of the aircraft and the streamlined cowling for the British 550 HP Alvis Leonides 9-cylinder engine found in N9381H. This aircraft was originally manufactured in 1944 and is serial number 1013.



It can be seen clearly in this photo that by the standards of the period in which most of the work was done, this aircraft (same as the one picture left) wanted for nothing in the way of IFR capabilities. Mr. Hewitt (who commissioned most of the work) was very obviously interested in creating an airplane that could take advantage of all the advantages of a Howard.



Yup, Gull wing doors with gas strut actuators! None here can pretend to know what Ben Howard or Goodon Isreal would have thought of such an innovation. However, I like to believe that they would have been pretty impressed. Had the technology existed at the time, one could imagine all Howards so equipped. Pretty Cool!



Pictured in front of NC95462 Is Foundation Member John Turgyan and Harold Nueman. Pictured on the right, Mr. Nueman was Ben Howard's race pilot after the airlines said he could no longer fly pylon races. In his career, Nueman enjoyed a great deal of success racing Howard aircraft. Harold went West July 5, 1995

THE HOWARD AVIATOR

On the Subject of Aerodynamic Flutter

By
Paul Bjornstad

As with a great many other things, it started with a conversation, over scotch, with Ron Spence and other Howard owners. In this conversation, Ron asked the group whether there existed a procedure for the mass balancing of the flight controls of a Howard DGA-15. Ron said he had not heard of one and was curious if we had. I, and the assembled others, stood mute. None amongst us had considered Ron's interesting question prior to this point. After significant conversation, it was clear that no person could come up with single a reference to a known procedure.

A time later, Ron's question still lingering in a portion of my undersized brain, I asked the same question to a number of other Howard experts. Were they familiar with any procedure to mass balance the flight controls of a Howard? I had looked in the many documents we now have available and found nothing. And based upon the responses I received, it appeared I had not missed anything obvious. No person or known Howard document could point to any procedure to mass balance the flight controls.

This caused me to wonder why.

As a great many of us know, the reason to balance the flight controls of an aircraft is to mitigate the possibility of aerodynamic flutter from occurring at any velocity within the aircraft's normal and certified flight envelope. Aerodynamic flutter can be envisioned by considering the wildly wobbling wheel of a shopping cart when it gets up to a high speed. Something in that system is causing the wheel to move back and forth at a particular frequency and in an undesirable fashion. In each oscillation, more energy is imparted to the annoying wheel. An imbalance is causing the wheel to move back and forth at its resonant frequency. The vibration will likely get worse if one speeds up and will not go away until the speed of the cart is slowed below a particular speed.

Aerodynamic flutter is precisely the same phenomenon, except that it is the aerodynamics of the fluid flow and the elasticity of the structure which causes a resonant vibration of the wings, the control

surfaces, or any other portion of the aircraft exposed to the airstream at a particular velocity. Though to us airplanes appear as robust and fairly rigid structures, in actuality, there is a surprising amount of flexibility in any aircraft. This lends itself to manipulation of the structure by the airflow and therefore the possibility of flutter.

Essentially, aerodynamic flutter occurs in a system wherein the oscillatory energy imparted by the airflow begins to exceed the damping characteristics of the structure.

An important strategy to mitigating this phenomenon is to ensure the weight

"We have dived the ship to an indicated air speed of 435 m.p.h. at 12,000 ft. with hands and feet off the controls without any indication of Aerodynamic flutter."

Ben Howard on the DGA-6

distribution forward and aft of the hinge line of a flight control falls within a particular value. This ensures that flutter cannot occur at speeds below Vne or Mmo Vne is the aircrafts "neverExceed" speed and Mmo is a similar speed but expressed in Mach number and used by faster aircraft. Both reflect the limit speed of the aircraft. Vne and Mom are generally based upon the onset of aerodynamic flutter and are the limiting factor in the determination of this speed.

It is the mass balance of the flight controls, and the rigidity of the structure which determines the speed at which flutter might occur. But, again, there is no published procedure to balance these controls on a Howard DGA-15.

So, how did Ben Howard handle the mass balancing and aerodynamic flutter issues in the certification of the Howard aircraft? To understand this, we must first understand the certification process for the Howards in general and the Howard DGA-15 in particular.

The Howard DGA-15 was certificated under the auspices of CAR-4 as a CAR-4A

aircraft. The A indicated that it was an aircraft of over 1000 points gross weight.

CAR-4 was implemented in 1937 and last updated in 1949 and is the precursor to FAR part 23. Both documents relate to the certification of normal category airplanes. Wherein CAR-4 is a spartan 60 page document, its replacement, FAR 23 is a whopping 620 pages not including the calculus resplendent appendixes. It is apparent that a great deal more is known and required presently than in 1940 when the Howard DGA-15 was conferred its Aircraft Specification (precursor to the Type Certificate). Of particular interest, is what was said in CAR-4 as it related to flutter:

04.404— GENERAL FLUTTER PREVENTION MEASURES.—The Secretary reserves the right to require special provisions against flutter in any case when such provisions appear to him to be necessary.

And

04.707—FLUTTER AND VIBRATION.—Wings, tail surfaces, control surfaces and primary structural parts shall be free from flutter or objectionable vibration in all normal attitudes or conditions of flight at all speeds between the minimum flying speed and the maximum certified speed.

That's it. To any aero Engineer of today, this is amazing. However, it has to be understood that, though flutter was recognized as a hazard in 1940, it was a sufficiently complex problem that many decades of research would would pass to achieve the understanding we enjoy today. Back in the 30s and the 40s, most engineers were left with only a few options.

The first of these was to induce a vibration onto the flight controls at various points to determine if there existed harmonic frequencies in a flight control or a phase relationship between surfaces that could be harmful. The test is done with a device that induces a vibration to the various control surfaces. The test was done, surprisingly, with the aircraft on the ground. This was accomplished on October 19th and 20th, 1939 and is found in Engineering Report

THE HOWARD AVIATOR

163. All frequencies were found to be satisfactory with the notable exception of the wing itself when measured in torsion. You see, BL Carter, the engineer for the CAA and Dr. R.J. Nebesar, Chief Engineer for the Howard Corporation, could not generate any data for a Howard wing in torsion. It was simply too damn strong! Imagine that, the wing was so strong that it essentially could not be tested in torsion!

The second approach required by CAR 4 was to determine that the Dynamic Balance Coefficient for the tail surfaces were all below .08. The Dynamic Balance Coefficient is a non-dimensional value which describes the interplay of the weight product of inertia of the surface and its total area. This is a strong indicator of the potential for a phase relationship between the tail surface controls which would be a form of aerodynamic flutter. This work is all computational and is found in Report 164, Dynamic Balance Coefficients for Rudder & Elevators, DGA-15 and is dated October 14th of 1939.

The vibration test and the dynamic coefficient of vibration calculations were a good start toward ensuring that the aircraft was safe. And, this approach was certainly reflective of the best engineering practices of the time (the field of AeroElasticity, as the study of flutter would later be called, was still many decades into the future). However, the aircraft's propensity for flutter of any type was still, essentially, undetermined.

The real proof of the absence of aerodynamic flutter was to be found in the dive-testing of the aircraft. We know the Vne of the Howard DGA-15 to be 270 miles per hour. This is found clearly in aircraft specification A-717 which delineates a great many important facts about the aircraft. By regulation, CAR-4 to be specific, Vne can only be 90% of the speed attained during the dive-testing of the aircraft. So, we know that the

DGA-15 must have been flown to a speed of at least 300 mph during flight test. This was done without any indication of aerodynamic flutter.

Of course, considering Benny's personality, I would imagine that the aircraft had been flown even faster at some time. Just conjecture on my part. However, we know Ben liked to make his airplanes strong, very strong! We also know he liked to fly them fast, very fast! How fast would he or a member of the factory actually have flown the DGA-15? Who knows? But I like this quote from Ben Howard's description of testing the DGA-6 as a possible indicator:

"We have dived the ship to an indicated air speed of 435 m.p.h. at 12,000 ft. with hands and feet off the controls without any indication of Aerodynamic flutter."

I sure would have liked to have been on that flight! Ok, clearly Mr. Howard was referring to the DGA-6 in this quote. That airplane had a great deal more power and slightly less frontal area than the DGA-15 we are discussing. However, it clearly shows that Ben Howard was not averse to testing an airplane beyond reasonable limits, "really wringing her out" to use an oft quoted phrase of the time.

Jim Rezich of Rezich and Rezich Aviation Consulting Inc. shared with me his opinion that this speed quoted by Ben relating to the DGA-6 likely benefited from some old fashioned embellishment and self promotion. Jim points out, correctly, that the frontal area of this aircraft was extremely high making attainment of that speed unlikely. What ever the actual speed, however, it is abundantly clear that the aircraft was dive-tested to speeds well beyond anything attainable in normal flight.

Does this relate to the DGA-15? I believe it does.

If we go back to the original question of a mass balance procedure for the Howard DGA-15, it appears that there really is not one. In simple terms, the Howard DGA-15 is overbuilt by very significant margins. As important is strong evidence that the airplane was over-tested to equally significant margins.

Jim Rezich shared this anecdote, "In the Howard Story that my dad wrote he did regale us about the time that test pilot Walt Diaber had the wrap cowl come off during a dive to 280 mph as part of the Navy acceptance flight. It took out the windshield, trim, part of the left wing flap and left elevator, but Walt got the airplane back on the ground using full power. His concern was that the fabric would leave the fuselage, but that's why it's rib stitched and it did hold! I remember my dad saying that part of Walt's test "kit" was a special 2 x 4 that he put in the windshield Vee to keep the windshield from caving in during the dive tests."

Wow! The dive-testing at the Howard Aircraft Company must have been really serious business!

Putting it all together, one logically concludes that a Howard designed aircraft is so strong that the rigidity of the structure very effectively damps oscillations and therefore moves flutter speeds to well beyond that which the aircraft can attain in nearly any flight condition. This is also well beyond any speed encountered in normal flight That essentially renders any consideration of mass balance mute.

In the panoply of things to consider when operating a Howard, one would put aerodynamic flutter at the opposite end of any list of concerns from where one would find 30-knot crosswind landings.

Paul

Some months ago, Roger Orr had elected to sell his aircraft, NC5524N, a Howard DGA-15P. Though this always presents the opportunity for another to enjoy one of these amazing aircraft, the possibility exists that the aircraft might leave our country or go to someone not as involved as Roger. Well, we are happy to report that this Howard has been purchased by Jonathan Gourley of Seattle, Wa.

Jon is a very active member of the Howard Aircraft Foundation and currently has a project Howard as well. Jon was able to attend the Howard Foundation Flyin at Siren Wi. last year and is a committed enthusiast of these fine machines.

Our congratulations go to both Roger and Jon!



THE HOWARD AVIATOR

Winner of National Air Races Built His First Plane before He Was 19!

Benny Howard's Mother Never Worries While he is Flying His Own Ship

By Harry McCormick
Reporter for the Press

Like a Story from Horatio Alger is the story of Benny Howard, Houston boy, who Friday won the Bendix Air Races in Cleveland.

At 2220 Hamilton Street, his mother, Mrs. Francis Howard, was beaming with happiness at her son's newest success told the story.

The story of his youth was the story of his success Friday, which is not his first time to win national acclaim.

"I first noticed his inclination toward aviation during the World War," his mother said. "He was 12 or 13 years old then, but he read everything on the airplane phases of the war that he could get and told me, while still a youngster in knee pants, that someday he would build the fastest airplanes."

He built his first ship here

"He got odd jobs, went down to the Rio Grande Valley with one of his brothers, saved every penny he earned and built his first ship right here in Houston before he was 19. In fact, on his 19th birthday he flew to San Antonio to visit me"

"He worked night and day to complete a correspondence course in aviation. It took him 18 months, and no boy studied any harder than he did."

Mrs. Howard said she never felt apprehensive about his work as long as he was flying his own ships.

"He has what he calls a factor of seven for safety," she explained. That is, he makes

them seven times stronger than what is considered necessary for safety. His ships are sturdy and well built."

This year was his first tryout join the Bendix contest. He wanted to enter last year but just before the races a friend of his cracked up in his plane and damaged the landing gear and the propellor so badly that he was unable to enter.

Most would have splintered

"Any other ship would have been reduced to splinters but his factor of seven for safety stood him in good hand."

In 1930 Howard built a small plane which has been in the money every year since at the National Air Races. In 1933 he cleared \$10,000 in prizes and money from aviation.



Alger might have written Story of Young Pilots rise to fame by hard work

"He has always made money at it," Mrs. Howard says. "I think he has been fired with genius. He was the first to build a small racing plane and has been very successful with it. He doesn't particularly care about flying. That is, he is not as enthusiastic as he is about building and designing."

"He thinks, talks, and dreams about building faster ships. I didn't go to the races this year. I went the last two years to the national races, but it was too much of a strain on me. I saw a woman killed and another plane crack up. I don't feel apprehensive, but it is a strain in a race like that with death riding along with your own boy."

Mail Pilot

Howard is 31 years old and carries mail in an air transport for United Air Lines, flying between Chicago and New York.

"I have taken several flights myself," Mrs. Howard said. "I like it a great deal. I have flown only one long distance flight with Ben, but I go to see him quite often and I always go by air."

Mrs Howard said her son sent her a telegram almost immediately after the race was won.

"Came through safely, mother!" the telegram read, "We won the race!"

I guess he thought I was worried about him, but I wasn't a bit," his mother said with a smile. "I never worry about him when he is flying one of his own planes!"

From the Houston Chronicle. Written as a wire article by Harry McCormick. September 1935.

THE HOWARD AVIATOR

Personalities

Aerodigest October 1933

Halley's Comet went by in 1910 and Ben O. Howard whizzed past the spectators at the National Air Races; Chicago, in 1930. Both events were equally startling. In fact, I had expected Halley's Comet, but the comet-like Howard was a complete surprise to me. Neither before nor since has there been such a popular reading combination as Benny and "Pete", the little white plane with the Gypsy engine, in which he won five first places and finished third in the Thompson Trophy with a speed of 162.80 mph. Since then, many pilots have flown faster; but none has created the real sensation that Ben O (just plain Oh) Howard created in Chicago in 1930. That was the highpoint of his life; everything since then has been a stepping down from that climactic point of his career — until he got married, and that was the end of him as a speed demon.

He is now, as he has been since 1930 a hard working pilot for NAT between Kansas City and Chicago. Airlines, as you know, frown upon their pilots entering races, so Benny must content himself with entering his plane and having Roy Minor fly it as he did in Los Angeles this year. Under Roy's guidance the Howard DGA-5 with a Menasco B-6 won 5 first places and one third, making speeds up to 197 mph in the closed course events and 241 mph in the Shell Speed Dash.

His ship won \$6,925 prize money, next to the highest amount won by the Wedell-Williams air service of \$13,400. That must have cheered Ben a great deal and sweetened his outlook on racing which rather soured on him last year.

You see, Ben entered a period of prosperity with "Pete" which paid for itself four times over; and then, greatly elated, he built Mike and Ike only to learn that he had over judged the cash prize market. He as so annoyed about it that he went around Cleveland in 1932 and bit pieces out of the grand stand and Cliff Henderson.

There is one thing you can count on at the National Air races; there is always a good snappy fight about something or another. It's only put on to add interest to the sport of racing and to see us limber. When all else fails, Ray Brown shadow boxes with Jack Berry, or Roscoe Turner misses a

pylon and hits the contest committee. But, its all in a spirit of good clean fun.

Ben Howard was born in Palestine Texas Feb, 4th, 1904, and despite his best efforts to avoid any education whatsoever, was held in school long enough to finish half a term of high school, when he leaped clear of all guidance and attached himself to a soda fountain. They paid him too much money, for in one week he had 10 dollars saved, and bought a Standard Bi-plane for the ten, promising to pay another ten every week for fifteen weeks. Well, the next day he sent word from the hospital that the former owner could have the wreckage of the aircraft back. Ben had taken it up with enthusiasm and nothing else. He spent a hot summer in a plaster cast, which is an unpleasant way to spend a hot summer in Texas.

When the 17 year old flying enthusiast was able to hobble around once again, it was that fine gentleman, the late R.W. Mackie, who gave him some needed flying lessons in return for mechanical work. This was in Houston in the winter of 1922, after which Ben flew for a year for CC Cannon, an oil operator with drilling operations all over South Texas. He paid for the Standard that he had used up, went to Nicholas Beazely in the summer of 1924 and then back to Houston to build his first ship, the DGA-1. Mike and Ike are DGA 4 and 5. I wonder if the department of commerce guesses what DGA stands for. The answer is, "Damn Good Airplane."

In the spring of 1926 Ben joined J Don Alexander at Denver where he stayed for two years, was fired twice, and went to Dearborn to insert rivets in Fords for a month, then joined Robertson Air Lines in St. Louis to fly J-5 Fords on the Chicago run. The next spring he was fired by his dear friend Bud Turney and went to fly for T.A.T. which was just starting. By Christmas, he was fired for reasons that seemed adequate to Dog Collins, even if they did not to Ben, so he went to Universal flying mail back and forth between St. Louis and Omaha in Pitcairns and Stearmans and mail and passengers from Chicago to Tulsa in F-10s.

Then he told his boss, Bob Rentz, a few truths and got fired in September 1930. In

November he was working for N.A.T. in time to be canned in December because they shutdown the Stout Airlines operation.

For a couple of months he rebuilt Pete and then went to work for Bill Bliss in person for Century Airlines, but was offered a job back with NAT, so he returned to that company where he has been ever since flying between Kansas City and Chicago.

He is careful not to get fired from NAT because he is running out of airlines. Besides, he is married now and settled down. Probably, the sensible thing to do will be to stay on with the airline and shuttle back and forth between Kansas City and Chicago until he finally wears out. we all wear out from something or another — usually it is something we don't especially care about.

In Ben Howard's case, he has an undoubted genius for designing racing planes. I hope that he designs a dozen more of that interesting series known as the DGA.

Written by the editorial staff of AeroDigest, the Personalities column highlighted individuals in aviation who where accomplished and who had an intriguing personality. Clearly, Ben Howard fit that bill

Did you know that the Howard DGA-15 was the first airplane to receive an Aircraft Specification in 1940? Conferred as Aircraft Specification A-717 and granted under CAR-4 this was the CAB's (precursor to the FAA) permission for Ben Howard and the Howard factory to start making airplanes.

The specification has been modified 7 times over the last 78 years. This includes the sale of the document to Clayton Scott and Jobmaster and its the most recent grant by the FAA to the Howard Foundation for its stewardship of the Aircraft Specification.

CLASSIFIEDS

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FAA Designated Airworthiness Representative (DAR), Jim Rezich, Howard member knows aircraft well. Need help, call [815-494-8115](tel:815-494-8115) or e-mail jim@rraero.com

Acorn Welding is making stainless steel heat muff for the 985. They already have received five orders from members. Call: [1-888-388-8803](tel:1-888-388-8803) or e-mail at www.acornwelding.com

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I need the following: Spider ring and baffle extender. Contact Kevin at [303-536-4978](tel:303-536-4978) or kevink@kenaero.com

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