

# The Flightline



#### Volume 48, Issue 9 Newsletter of the Propstoppers RC Club AMA 1042 September 2017



As many of you know I have been having some medical issues over the last few weeks resulting in a weeklong stay in Riddle Hospital. It seems like it may have been caused by my meds as the doctors changed them and I recovered sufficiently to be released.

I want to thank all of you that visited me or expressed the hopes for my improved condition.

Meanwhile I had arranged for the field maintenance to continue and hope the members have been enjoying their flying.

I hope to see you at the meeting next Tuesday.

Dick Seiwell

#### Agenda for September 12th Meeting At Gateway Church Meeting Room 7:00 pm till 8:30

- 1. Show and Tell
- 2. Membership Report
- 3. Finance Report
- 4. Club Calendar Review
- 5. Plan for September Club Picnic

# Propstoppers Club Monthly Meeting

#### August 8th 2017 at the Christian Academy Field

The meeting took place on the field with magnificent evening weather. Attendance was good but everyone wanted to just talk and fly. So it was decided not to hold a formal monthly meeting. Therefore there are no minutes to report.

The highlight of the evening was Dwayne Myers drone which he flew to take pictures of the members. See next page.

Dave Harding for the club.



# Looking for volunteer to take over as Newsletter Editor

After 17 years with one short break I am ready to hand over the baton to someone more involved with the club activities. We have a really healthy club with many members flying up a storm at both of our fields. There is a lot to report. How about stepping up to serve?

#### INSIDE THIS ISSUE 1 President's Message 1 August Meeting 1 September Meeting Agenda 1 Club Picnic Plans and Dates 2 Club Command Media Updates 3 Another Wonderful Picnic 5 Safe Flying is Everybody's Responsibility 6 **Club Officer Elections** 7 Horizon's X-Vert 8 The Origin of the Species 9 Baby Boom, a new Supersonic Airliner Prototype

# **Club Picnics**

September 16th at CA Field

December 12th Indoor Holiday Party

#### Calendar of Events

#### Club Meetings

Monthly Meetings Second Tuesday of the month. Gateway Community Church at the Christian Academy. Doors open at 7:00

#### Next Meeting;12th Sept. at the Gateway Church Meeting Room

Tuesday Breakfast Meeting

Tom Jones Restaurant on Edgemont Avenue in Brookhaven. 9 till 10 am. Just show up. Flying after in the summer at CA or Elwyn Field 10 am. Weather permitting. Indoors at the Brookhaven Gym in bad weather 10:30-11:30 See dates allowable.

#### **Regular Club Flying**

At Old Christian Academy; Electric Only Monday through Friday after school till dusk Saturday 10 am till dusk Sunday, after Church; 12 pm till dusk At Elwyn Field; Gas or Electric Monday through Saturday 8 am till dusk Sunday 12 pm till dusk INDOOR Flying, see attached dates.

#### **Special Club Flying**

Saturday mornings 10 am Wednesday Helicopter evening in summer Thursday evenings in the summer Tuesday mornings 10 am weather permitting

after breakfast. Check our Yahoo Group for announcements;

http://groups.yahoo.com/group/propstoppers/

#### Beginners

Beginners using due caution and respecting club rules may fly Apprentice or similar models without instructors at Christian Academy Field. The club also provides the AMA Introductory Pilot Program for beginners without AMA insurance.

#### **Propstoppers RC Club of**

Delaware County, Pennsylvania. Club Officers

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reslawns@verizon.net

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#### **Club Command Media and Safety Updates**

Several club members have recently expressed concerns about safe flying and potential risks to maintaining our fields. This has resulted in the Board examining our Byelaws, Safety Rules and other material on our website.

The conclusion is much of this material is out of date and needs to be revised. Indeed the safety aspects are critical and need to be addressed forthwith. See the statement by our Safety Officers in this newsletter.

Furthermore, the Board realizes that although this material is available to all members via our website, we have not required new members to read and understand it. Therefore new members acquire the club practices by participating in the activities that take place at the fields or indoor locations. This clearly doesn't work all that well hence the current concerns.

Consequently the Board will be requesting the support of the members to help in addressing these issues. If we all take on a piece of this task we should be able to quickly update our practices and complete the process by providing all members with the updated rules etc. If you are approached by the Board to help, please accept. We want all members to engage in this process whether you are able to attend the monthly meetings or not.

In addition to these updates we have begun to recognize that although "drones" are fun to fly and enable a whole new world of flying experiences they also potentially introduce new threats to maintaining the rights to fly at our fields.

The long unpleasant side of losing a field has historically been associated with objectionable noise or occasionally crashing into private property. And these are still issues that can result in loss of fields in an instant.

But drones have introduced a new "threat" and this one is National. I am referring to the privacy issue; "peeping drones". We are well aware that the FAA as well as State and local governments are crafting all kinds of rules to address this issue. But for us and our fields it seems to me we need to ensure no drones "appear" to the surrounding houses allowing for such complaints.

History shows that it doesn't take many such complaints for the property owners or local governments to end our use of our fields.

#### The Board



August Club Meeting on CA Field. Taken from Dwayne Meyers Drone.

# **Another Wonderful August Picnic**

After a week of threatening weather forecasts our Saturday Picnic turned out great. Good turnout, good conversation, great flying and good eats.



The Schurman family, dad Tom and son Ryan put on a spectacular display with identical EDF models.



Also, welcome Lamar and Pete, expert helicopter flyers who put on several extraordinary flight displays with their electric helicopters. They are also flying at Elwyn field with their glow powered models. Should both be signed up club members by the time you read this. Say hi to them on the fields.



### Safe Flying Is Everybody's Responsibility

#### By Safety Officers; Eric Hofberg and Ryan Schurman

*I heard it through the Grapevine*. Not just the name of a once-popular song, but an alarming story of flyers in our club who have used the Elwyn field, overflown Route 352, and needed to recover their airplanes from the far side of the highway. The story continues with some flyers landing/crashing in the parking lot and too close to the buildings. I can only assume that the flyers in question have not used good judgment and may well lack the ability to safely fly what they have brought to the field.

For many years there was a training program in our club and surrounding clubs. A new flyer was required to undergo training with a designated instructor and then pass a solo test *prior* to being permitted to fly without direct supervision. Our club still has designated instructors and many "go to" experienced pilots who would be very willing to assist with flight instruction. Our instructors are

Ryan Schurman 484-802-2319 Mike Black (484) 494-8054 and Al Tamburo (215) 834-6373

We now live in a time where the choice of what you purchase to fly is only limited by the thickness of your wallet, and it no longer requires countless hours to build that dream. The progression should be a high wing, more stable airplane, perhaps starting with a small, light flyer and progressing to larger airplanes as skill and practice dictate.

This process should be monitored by the experienced flyers. The flying fields should be policed by the members using them, and if you see someone continuing to fly in an unsafe manner and perhaps attempting to fly something beyond their skill level, this should warrant a discussion, perhaps with an offer to help. If there continues to be a problem, they should be reported to one of the field safety officers: Eric Hofberg (610 565-0408, <u>bgsteam@comcast.net</u>) or Ryan Schurman (484-802-2319 <u>throttle152@hotmail.com</u>).

If this message seems somehow petty and not worth your concern, rest assured that flying sites are very hard to obtain. The loss of a flying site due to someone's carelessness would be a major blow from which this club might not be able to recover.

#### Please observe the following rules, fly safely, and we'll all continue to have fun:

- 1. Announce your intention to take off or land.
- 2. Do not take off or land with someone on the field.
- 3. If you intend to step onto the landing strip to place your plane or recover same, say "on the field."
- 4. Do not overfly other people and refrain from making high-speed passes down the flight line.
- 5. Respect the boundaries of the field, do not fly behind the flight line or so high or far out that you lose your airplane.
- 6. All airplanes/helicopters/drones should be identified with the owner's contact information and AMA number on the airframe.
- 7. Try to coordinate your flight time with other flyers, i.e., you don't have to fly continually, give some others a chance to fly.
- 8. If you suspect that a flyer is not a club member and perhaps not an AMA member, please ask. Our fields are for the use of our club members only. Guest flyers are welcome for up to 3 visits if they are accompanied by a club member and are AMA members.
- 9. No taxiing in the pits.

10. No mixed aircraft types unless mutually agreed upon by the flyers present (heli, quad, airplane).

Hopefully, all of these issues should be resolved in a non-confrontational manner. Please review the club by-laws for a more complete understanding of our rules for flying. They are on the club website.

# Time for Club Officer Elections.

It is the time of the year for the club to begin the process of elections of officers. We are required by Byelaws to give notice to the club in the September Newsletter. This is the notice.

The elected officers who make up the Board of Directors are;

President Vice President Secretary Treasurer Note, the Membership Chairman is appointed by the Board.

Here are the Byelaws addressing the process;

#### 1. Article VIII - Nominations, Elections, and Recall

#### a. Nominations

- i. Any person running must be a member in good standing and a current AMA member.
- ii. An individual may run for only one office.
- iii. In the August and September newsletter, a note will be published of the upcoming nominations and election to be held in October.
- iv. Nominations must be presented at the October meeting either in person or by written statement. No nominations will be accepted after the October meeting.
- v. The November newsletter will be made available to all nominees to present their views and platform.
- vi. At the November meeting all nominees will be given the opportunity to reiterate their views and to answer any questions from the members present.

#### **b.** Election

- *i.* The ballots will be printed after the November meeting and mailed to all members with a self-addressed stamped envelope to be returned to the designated collection point determined by the president. (*Note; the Board may decide to accomplish this process by email.*)
- ii. The ballots will be opened at the December general meeting and counted by two (2) individuals as designated by the president.
- iii. Any nomination at the October meeting having only one person for a position in each category shall be voted into office by the majority in attendance.



Here is another clever VTOL airplane from Horizon. Like many such airplanes and drones it includes a hugely capable auto-pilot and multi mode controller to enable helicopter like hover and transition to airplane wing-born flight.

But wait, this has been done before. In fact invented by a good friend of mine; Nick Albion. Nick was one of Boeing's seven original Technical Fellows.

Nick argued that such a layout was similar in the helicopter mode to Boeing's tandem rotor helicopters. But in the airplane mode it would be much more efficient and faster than the competing helicopter UAV's of the time.

However, Big Brother Boeing in Seattle was a bit short of work at the time so they took the idea and began the development. Here is a report on that work.

**Heliwing** was designed, built and flight tested as a test platform for various airborne sensors developed by Boeing. Proposed to US Navy early 1994 as candidate for Vertical Launch And Recovery (VLAR) requirement for ship-based surveillance missions. Boeing was awarded a \$2.6 million DoD contract about two months later. Wind tunnel tested by Boeing Helicopters in summer 1994, followed by first flight on 26 April 1995. Aircraft destroyed in crash during landing phase of ninth (and last scheduled) test flight on 13 June 1995.Boeing began production of a second prototype shortly afterwards, but this was suspended a few weeks later.

However, at that time the UAV world was dominated by mostly overgrown model airplane companies and it was unlikely that such a machine developed and built by Boeing would ever make a good financial fit for the Company. This was probably the primary reason the idea was not pursued further.

Enjoy it Eric, show us how it performs.





Dave

### The Origin of the Species, from the UK Aeromodeller magazine 1976.

The term 'all-rounder' no longer conjures up a vision of the club whizz kid juggling a U/C handle, a F/F winder and R/C transmitter with contest winning dexterity, we think instead of the rotund, sedentary figure we now see on the flying field who has given up chasing anything, even models. We live in the age of specialization, where we are known by our particular fixations.

A sense of unease runs through the club enclave when old Bloggs staggers onto the flying field with anything other than his customary SE5, and there are mutterings and black looks if the established Wakefield flyer infiltrates a Coupe d'Hiver event.

Perhaps the nearest we have to an all-rounder is the Radio man who sportingly enters the chuck glider event on gala day, or the club room hanger-on who is surprisingly seen to be flying a model.

Any biologist, running a practiced eye over the club room assembly, could easily identify the various factions by their particular genus characteristics. He will note first the fat cats; the sleek, slow moving Radio men, then the wild, hairy U/C pack, all banter and bonhomie, and lastly the lean and urgent free flighters, given to dark, tribal mutterings.

He will know that model flyers do not choose their particular vocations; they are born to them, just as monkeys are to climb trees and donkeys to dither. So what price club unity with the members going off in all directions like a rampant MRV? A club night film show of skidding pylon racers and jumpy helicopters will have the free flighters making snide remarks like 'How money flies' and 'probably clockwork', whilst a shot of a U/C team race will bring from the radio boys a derisive,' What's on after the Flintstones?.

What then can you get an all-rounder-appeal talk or lecture, or write a newsletter article on, apart from 'Flight and other characteristics of the Birds and the Bees' that would be illuminating to all the diversely motivated members?

Should you try a building demonstration? Well, you could, but to many members of the plastic age, balsawood is just something they use in slapstick comedy scenes. Perhaps the club could most usefully bring along a biologist chap - buy-ologist for radio - to give a talk on how to recognize the species of modeler to which you belong.



# 'Baby Boom' to take off in 2020:

# Richard Branson-backed mini-Concorde that can fly from London to New York in 3.5 hours gets funding

- The subscale XB-1 Supersonic Demonstrator prototype will be created by aerospace firm Boom
- The jet is nicknamed 'Baby Boom' and will be scaled up as a passenger plane for 45 passengers
- The Virgin Galactic tycoon already has options to buy 10 of the new supersonic Boom jets
- They will reach 1,451mph 100mph faster than Concorde and travel from New York to London in 3.5 hours
- The prototype jet was built in Colorado by former Amazon executive and Boom CEO Blake Scholl By Ellie Zolfagharifard for MailOnline

PUBLISHED: 08:58 EDT, 23 March 2017 | UPDATED: 05:14 EDT, 24 March 2017



A futuristic supersonic passenger airliner has got the funding it needs to take off on a test flight this year.

Boom Supersonic said it received \$33million (£26million) in funding and is ready to build its XB-1 jet prototype. Backed by Virgin tycoon Richard Branson, the 'Baby Boom' jet could usher in a new era of affordable supersonic travel.

Claimed to be the 'world's fastest civil aircraft ever made', the XB-1 Supersonic Demonstrator is due to take off on its first test flight later this year and could take passengers from <u>London</u> to <u>New York</u> in 3.5 hours, its maker claims.

The company said the jet, which will cost more than \$200 million (£160 million) to build, may carry passengers by the early 2020s.

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# XB-1 SUPERSONIC DEMONSTRATOR SPECS

- Crew: Two (pilot + optional flight test engineer or passenger)
- Length: 68 feet (20m)
- Wingspan: 17 feet (5.2m)
- Maximum Takeoff Weight: 13,500 lb (6,120kg)
- Powerplant: 3X General Electric J85-21, non-afterburning; proprietary variable-geometry intake and exhaust
- Aerodynamics: Chine, refined delta wing with swept trailing edge
- Cruise: Mach 2.2 (1,451mph, 2,335 km/h)
- Nose Temperature: 307°F (345°F on ISA+20 day)
- Range: > 1,000 nautical miles (1852km)

The subsonic flight test will be conducted near Edwards Air Force Base in Southern California in partnership with Virgin Galactic's The Spaceship Company.

The prototype was unveiled in November at Centennial Airport in Denver.

The XB-1 is a technically representative <sup>1</sup>/<sub>3</sub>-scale version of the future Boom Airliner.

'I have long been passionate about aerospace innovation and the development of high-speed commercial flights,' said Richard Branson, founder of Virgin Group. 'As an innovator in space, Virgin Galactic's decision to work with Boom was an easy one.'

The airline tycoon has confirmed that Virgin has options to buy 10 of the recently revealed supersonic Boom jets, which will be capable of flying at 1,451mph (2,335 km/h) - about 100mph (160km/h) faster than Concorde - and reaching New York from London in three and a half hours.

'Sixty years after the dawn of the jet age, we're still flying at 1960s speeds,' said Blake Scholl, a former Amazon executive and CEO and founder of Boom.

'Concorde's designers didn't have the technology for affordable supersonic travel, but now we do. 'Today, we're proud to unveil our first aircraft as we look forward to its first flight.'



The XB-1 Supersonic Demonstrator is due to take off on its first test flight in late 2017 and could take passengers from London to New York in 3.5 hours. The jet is designed to carry two crew members



The subscale XB-1 'Baby Boom' jet (pictured top) is set to pave the way for the larger Boom Passenger Airliner (pictured bottom)

- Crew: Two
- Length: 170 feet (52m)
- Wingspan: 60 feet (18m)
- Passengers: 45 standard (up to 55 in high density)
- Flight attendants: Up to 4
- Lavatories: 2
- Powerplane: 3X non-afterburning medium bypass turbofan; proprietary variable geometry intake and exhaust
- Aerodynamics: Chine, refined delta wing with swept trailing edge Long Range
- Cruise: Mach 2.2 (1,451mph, 2,335 km/h)
- Nose Temperature: 307°F (345°F on ISA+20 day)
- Maximum Design Route: 4,500 nautical miles without refuel (8300km)

The XB-1 Supersonic Demonstrator features engines developed by General Electric, avionics from Honeywell and a carbon fibre shell from Tencate, with composite structures fabricated by Blue Force. The Boom jet was created by top aviation experts with collective experience working at NASA, SpaceX and Boeing.

Learning from the Concorde, they combined advanced aerodynamics, efficient engine technology and new composite materials to produce a 'safe and affordable' supersonic aircraft 2.6 times faster than current jetliners. *(wonder how the do the temperatures for Mach 2.6 in composites? Ed. )* 

The prototype has been subjected to more than 1,000 simulated wind tunnel tests and features a tapered carbon fibre fuselage, and efficient turbofan jet engines.

Unlike Concorde, the Boom design requires no afterburner, which should significantly improve fuel efficiency. In March, Virgin told MailOnline Travel: 'Richard has long expressed interest in developing high speed flight and building high-speed flight R&D through Virgin Galactic and our manufacturing organisation, The Spaceship Company.

'We can confirm that The Spaceship Company will provide engineering, design and manufacturing services, flight tests and operations and that we have an option on the first 10 airframes. It is still early days and just the start of what you'll hear about our shared ambitions and efforts.'

Scholl said: 'We're thrilled to be working with Virgin. It's hard to imagine a better partner for bringing supersonics to market.'

When created Boom will have 45 seats - with a ticket costing \$5,000 (£4,020). Speaking to **Bloomberg** earlier this year, Scholl said: 'The idea is for a plane that goes faster than any other passenger plane built before, but for the same price as business class.'

According to the simulations, Boom's design is quieter and 30 per cent more efficient than the Concorde. It will be split into two single-seat rows, so everybody has a window and an aisle.

To reduce weight, the seats are of the standard domestic first-class variety, so no lay-down beds.

To cut flight time, Boom's plane will cruise at 60,000 feet, where passengers will be able to see the curvature of the earth, while going 2.6 times faster than other passenger planes.

Scholl said about 500 routes fit the craft's market, including a five-hour trip from San Francisco to Tokyo and a six-hour flight from Los Angeles to Sydney.



The firm hopes London to New York could be one of its most popular routes, with a 3.6 hour saving on a normal flight



Created by aerospace company Boom, the jet nicknamed 'Baby Boom' could pave the way for the larger Boom passenger jet (pictured) and usher in a new era of affordable supersonic travel

'Boom was founded on the philosophy that we need to overcome the challenges to supersonic passenger flight, not surrender to them,' the firm says.

The firm hopes London to New York could be one of its most popular routes, with a 3.6 hour saving on a normal flight.

The firm even has record breaking US Astronaut Scott Kelly as an adviser.

It added: 'We're making a supersonic aircraft affordable for business travel. Our ultimate goal is routine supersonic flight for everyone.'



Scholl said about 500 routes fit the craft's market, including a five-hour trip from San Francisco to Tokyo and a six-hour flight from Los Angeles to Sydney

'Today, international travel means jet-lag and days of lost productivity and family time. But imagine leaving New York in the morning, making afternoon meetings in London, and being home to tuck your kids into bed. 'Unlike Concorde, flying Boom is affordable - the same price as business class,' said Boom.

Concorde was a turbojet-powered supersonic passenger jet that was operated until 2003.

It had a maximum speed over twice the speed of sound at Mach 2.04 (1,354 mph or 2,180 k per hour at cruise altitude) and could seat 92 to 128 passengers.

It was first flown in 1969, but needed further tests to establish it as viable as a commercial aircraft. Concorde entered service in 1976 and continued flying for the next 27 years.

The aircraft is regarded by many as an aviation icon and an engineering marvel, but it was also

criticized for being uneconomical, lacking a credible market, and consuming more fuel



Twenty aircraft were built including six prototypes and development aircraft

It is one of only two supersonic transports to have been operated commercially.

The other is the Soviet-built Tupolev Tu-144, which ran for a much shorter period of time before it was grounded and retired due to safety and budget issues.

Concorde was jointly developed and manufactured by Aérospatiale and the British Aircraft Corporation (BAC) under an Anglo-French treaty. Concorde's name, meaning harmony or union, reflects the cooperation on the project between the United Kingdom and France.

In the UK, any or all of the type are known simply as 'Concorde', without an article. Twenty aircraft were built including six prototypes and development aircraft. Air France (AF) and British Airways (BA) each received seven aircraft.

The research and development failed to make a profit and the two airlines bought the aircraft at a huge discount. Among other destinations, Concorde flew regular transatlantic flights from London Heathrow and Paris Charles de Gaulle Airport to New York-JFK, Washington Dulles and Barbados. It flew these routes in less than half the time of other airliners.

Over time, the aircraft became profitable when it found a customer base willing to pay for flights on what was for most of its career the fastest commercial airliner in the world.

The aircraft is regarded by many as an aviation icon and an engineering marvel, but it was also criticized for being uneconomical, lacking a credible market, and consuming more fuel to carry fewer passengers than a Boeing 747.

Concorde was retired in 2003 due to a general downturn in the commercial aviation industry after the type's only crash in 2000, the September 11 attacks in 2001, and a decision by Airbus, the successor to Aérospatiale and BAC, to discontinue maintenance support.

