

EL TORBELLINO

NEWSLETTER OF SAN DIEGO ORBITEERS FREE FLIGHT CLUB



JUNE 2022

Chairman's Corner – Mark Chomyn

We've now moved from the May Gray weather pattern to the June Gloom. But, as I've said before the sun on is still shining on Taibi Field in Perris. And so it was on Sunday, June 12 for our monthly contest. I arrived at the field just about 8AM and was treated to the sight of a long line of cars. It was a great turnout and one of the few times I can remember when we need sheet two of the AMA sign up sheet. The OT Nostalgia event was won by Bernie Crowe of the SCAMPS with Mike Jester taking a close second. I wanted to fly my 1932 Gordan Light Wakefield but low power test flights exhibited some banking that was not conducive to the high power flights necessary to be competitive. So, I flew my Hank Cole Cruiser just to get on the scorecard. I got about a minute per flight with the plane. Got a lot of sun and fresh air, but no prizes.

Unlike the last few years where we've not held monthly contests in July and August, we're going to try a contest in July and adjust the start/stop times to see if that allows us to avoid hotter temperatures as the clock moves toward noon. We'll try the new format in July and see how it goes. So, the July 10 monthly will start at 7:30 AM and stop at 10:30AM. We're going to give it a try and see if that helps beat the heat. If it is successful, we'd follow the same time frame for an August contest. So, keep your eye on the El Torbellino and your email and stock up on water and sunscreen.

Cliff Brooks was at the June contest, and he brought out some modeling items, mostly plans and model magazines, that could be taken for no cost. The plans collection contained a lot of classic model designs (Korda Wakefield, Lanzo Record Holder, Hank Cole Stratosphere) and some were taken by flyers at the field. I took the box of plans remaining as they were to be tossed after the contest if not spoken for. If anyone is still interested in the plans remaining, I will be bringing the plans that remain to our future events, and they are available for free. I dare someone to build the Ted Just Streak. The plane has a 56-inch wingspan, a stabilizer the size of a two-bit rubber model's wing and an 18-inch propeller. Looks like it needs about a pound of ¼ inch rubber to motivate it as the plan shows a length of 36-inches from the rear post to the nose block. The plan says the model weighs 9.13 ounces. If you've got a lumber yard of balsa, give it a try. Even if you can't win with it, it will get noticed at the field. Especially the sound of the grunts and groans as you "pack in the winds".

Don't forget. June means Father's Day (June 19). So, clear out a spot in the workshop and the building board for all those great modeling items you're going to get. What? You didn't tell your clan how much you love your hobby and how you really like getting things that fly? Oh no! Here come the ties, socks and underwear. You'll feel just like you did in grade school on Christmas Day at your aunt's house. Just kidding, hope you flyers and your families have a great Father's Day. Throw a shrimp on the barby and down a cool one for me.

In closing, the question is sometimes asked, "Why should I enthusiastically support my flying club?" Well, if you looked at the April edition of the El Torbellino, you would have seen a picture of those who flew in the Pitsco Raven one-design event. And, if you read the byline under that photo, you would know that if you could name all the flyers in that photo, you could win a prize. So, if

you're not supporting the club by attending the monthly outdoor events, then you might not be able to identify all those distinguished flyers and miss out on a great prize.

That's it for now. Hope to see you at the field in July.
Mark

"The competition flying of free flight model aircraft of vintage design is intended to be casual, enjoyable and interesting for both competitor and spectator alike."

Bruce Chandler from the SAM Preamble, The OLD TIMER Phenomenon, SAM Speaks, April- June 2022



Chairman Mark Chomyn - June 2022 Monthly Contest - Photo by Arline Bartick



Built-Up Fuselage Construction

By Mike Jester



Many rubber powered models have fuselages made from balsa wood longerons joined by balsa wood cross-pieces. I have built many such fuselages by first building one fuselage side over the side view on the plan and then building a second fuselage side the same way. When these fuselage sides are joined with horizontal cross-pieces invariably the longerons are uneven, no matter how hard I tried to lay them precisely over the plan. Not only is this visually unattractive, but it can lead to the wing and/or stab leaning the wrong way which requires shimming and/or sanding to fix. I have resisted building one fuselage side over the other because they will usually end up being glued together and have to be sliced apart. This can be an extremely difficult task if you have used CA in building the fuselage sides.

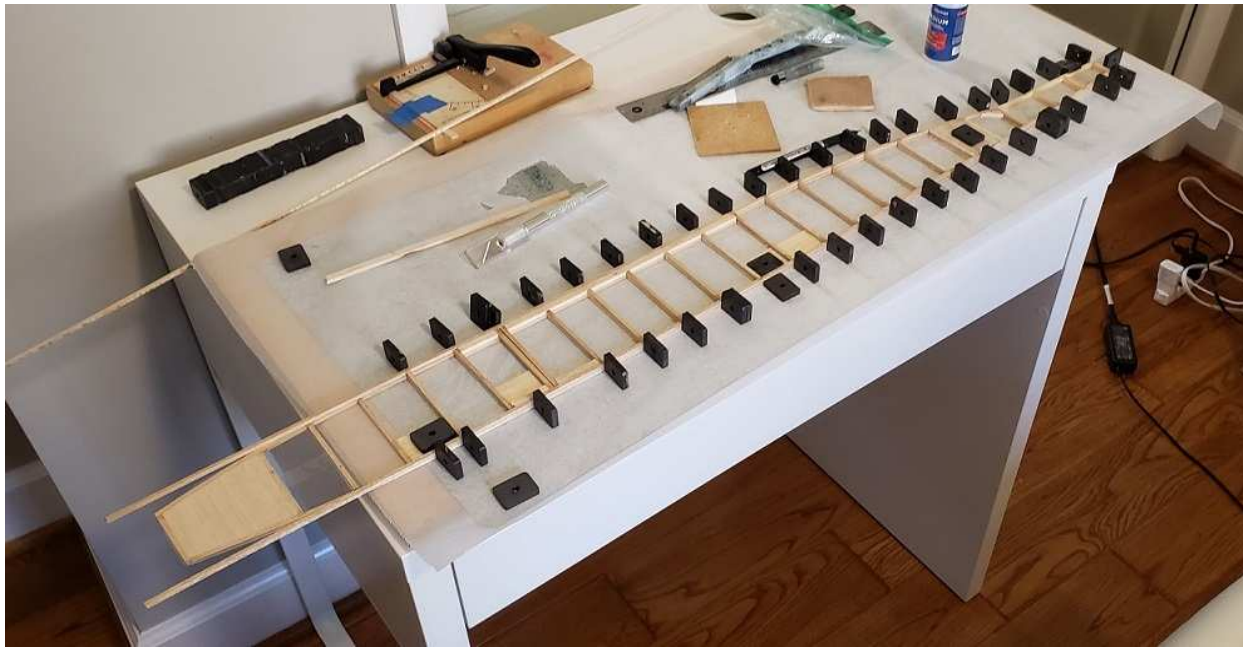
Recently I constructed fuselage for a Smith 1941 Mulvihill Winner. It is basically an overgrown Gollywock. See the picture of Bud Romak's Smith Mulvihill below. The longerons and cross-pieces are made of hard balsa wood since the recommended rubber motor is 24 x 1/8. I wanted to use CA in constructing the fuselage to achieve maximum strength. This is how I did it. I covered the plan with translucent parchment paper used for baking that resists the adherence of CA. I constructed the first side of the fuselage over the side view of the fuselage on the plan using medium CA. I used the Magna Board system that I purchased from Easy Built Models. It is basically a large rectangular piece of sheet metal and a bunch of rectangular magnets. I then covered the completed first side of the fuselage with clear packing tape. I adhered the adhesive underside of the tape to the balsa wood. Even CA won't stick to its slick backside. I then trimmed away the excess tape that extended beyond the longerons using a sharp Xacto blade. This allowed me to place magnets vertically against the longerons of the first side of the fuselage to act as guides for aligning the longerons of the second side of the fuselage. Working from the rear to the front, I cut, sanded, and inserted the motor peg and nose piece side panels, and the uprights making sure that they pushed the longerons against the magnets.



Bud Romak with Smith Mulvihill.

Bud Romak and his Smith 1941 Mulvihill Winner

When the construction of the second fuselage side was completed, it was easy to separate the two fuselage sides and remove the packing tape from the first fuselage side. A final inspection confirmed that both fuselage sides have an identical shape and that the longerons are in perfect alignment. If you are not building from a laser-cut kit, you will have to make your own vertical nose piece and motor peg side panels out of sheet balsa wood. Cut and sand the first pair so that they precisely fit the plan when building the first fuselage side. This will ensure that the longerons are in correct position. Before gluing these pieces in place, use them as templates to cut and sand identical nose piece and motor peg side panels for the second side of the fuselage. Do the same for the horizontal nose piece panels.



Second Smith Mulvihill Fuselage Side Being Constructed on Top of First Fuselage Side

I added sheet balsa wood panels to the lower portion of fuselage sides, aft of the wing mounting area. They will provide support when gripping the fuselage for launching the model. The two sheet balsa wood panels forward of the wing are for mounting a viscous timer button and mouse trap arm for the DT. These two panels will be located on the left side of the fuselage.

Of the original four Smith Mulvihill models that were built, three were lost. This is not surprising as the plan and build instructions for this model that were published in 1942 made no provision for a DT. I will add a DT and an RF locating transmitter to my Smith Mulvihill to increase the odds of its recovery.



← Mike Jester, June 12TH Monthly

FROM THE WORKBENCH – John Merrill

Finally got this done! Just in time for the Scale Staffel contest this weekend. It's a "double nickel" scale Howard. The kit is just one of a series, all 20" wingspan, which is twice the original 10" size. They are very nicely produced by William Scott and his company P.T.Aviation. They are, or should be, a fairly quick and simple build, unless you are as slow as molasses like I am!

I did have fun with it, even found out that this version, a Navy ambulance, had a P&W R-985 engine, so I made a copy of a picture of that engine and glued that on her nose.

So, what's on your workbench?



BILL BOOTH

Inducted into the NFFS Hall of Fame - 2021



Bill Booth – Perris CA



See next page for Bill's Bio write up →

BILL BOOTH JR.

LIFE, MODELING ROOTS & CAREER



Bill was born into a modeling family in Fresno, California in 1954. There is a photo of him at age 1, sitting under a side table clutching a Torp 35. As soon as he could walk, he was tagging along with his Dad, first to U Control contests and eventually to free flight meets. (Bill Booth Sr. was President of SAM in the late 1990's and is a SAM HOF Member). Other than an adventure to the 1963 and 1967 NATS in Los Alamitos, Bill's early years in free flight only included the monthly meets of the Fresno Gas Model Club in the Central Valley of California. Exposure to outside modeling was limited to the Fresno Annual that attracted many prominent modelers from around the state. In early High School Bill convinced his Dad to take a day trip to a meet at Gardner Field in Taft and a whole new world of free flight opened for both of them.

After High School Bill attended The University of California at Berkeley. He was honored to be the recipient of the top AMA College Scholarship in 1972. He graduated in 1976 with a degree in Architecture. After graduation, he returned to Fresno to marry his High School Sweetheart and has been happily married to Sue for 44 years. While preparing a portfolio that was planned for a job search in Sacramento, where his good modeling friends and the FAI Power brain trust lived, Bill got a job offer in San Diego that was too good to pass up. It seemed like a great

adventure for a couple years, but instead San Diego County became their home. Modeling never stopped, but took a back seat from the late 70's into the 80's while his career grew. For 30 years, Bill was the Principal Architect and Managing Partner of Booth & Suarez Architecture Inc, one of the largest Architectural firms in San Diego County. While most architectural companies design projects to be seen, BSA designed over 4000 wireless telephone sites for all the major carriers with the specific goal to not be seen. Skills and understanding learned from modeling had a great influence in developing the design for "stealth" and other elements of architectural concealment. BSA was known as the best of the best in this niche market.

As Bill prepared to leave for college, he had the good fortune to be introduced to Dave Parsons. Dave lived a short bike ride from the Berkeley campus and welcomed Bill into his home and his shop, drove him to contests and most important exposed him to the champion modelers of the Oakland Cloud Dusters, The National Free Flight Society and what real FAI international competition was like. Later, after moving to San Diego County, Bill joined the San Diego Orbiters and was exposed to a different group of Champions with different interests, such as, Cezar Banks, Clarence Mather, John Oldenkamp and Bob Beecroft. Those introductions also set an example of how important it was to give back to the hobby.



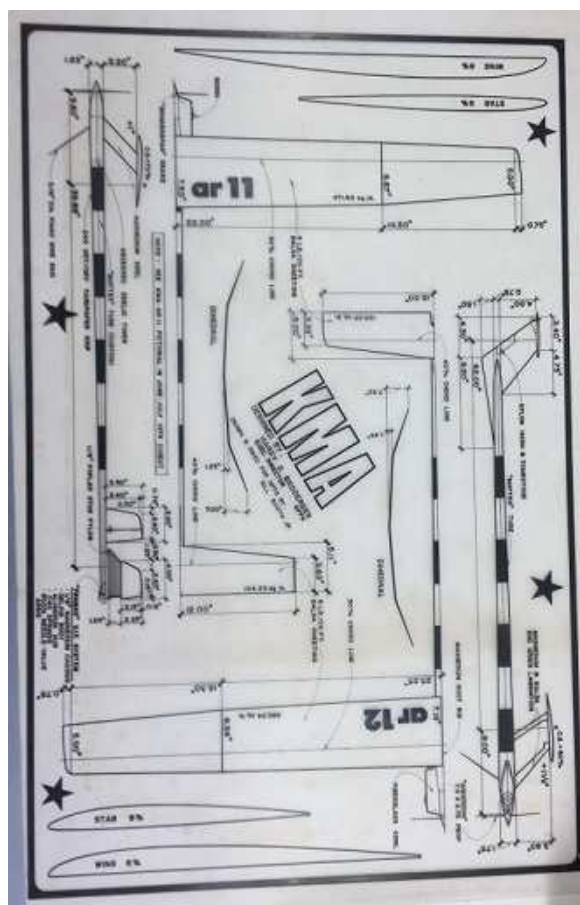
CONTEST DIRECTOR

As a teen, Bill was tutored to be a Contest Director by Ocie Randall (AMA & NFFS HOF). As a CD, Bill has taken on some of the biggest and most important meets in the US with the enthusiasm and attention to detail taught by Ocie. His goal has always been to address all the details to create an environment where modelers feel welcome and comfortable so they can focus on the competition, feel they are somewhere important and head home with good memories.

MODELING MILESTONES & ACCOMPLISHMENTS

- *Won first Fresno Gas Model Airplane Club Junior Championship at age 9 in 1963.
- *First NATS was at Los Alamitos in 1963 as Dad's Mechanic. 1967 was first NATS as a competitor.
- *Won first "High Time of Meet" at Fresno Monthly at age 12.
- *Senior Class A & B Gas National Records set in October 1971. At the time, the B gas record of 60:10 was the second highest on the books including Open Records.
- *2001 F1B Americas Cup Champion. Several runner-up and podium finishes.
- *1st Place F1B Beauvoir del Sur, France 2013
- *F1B World Championships Team Member, Mongolia 2015
- *3rd Place F1B Tuvshin's Cup, Mongolia 2015
- *1st Place F1ABC MixMan, Mongolia 2015
- *1st Place F1B Kotuku World Cup, Lost Hills 2019
- *1st Place F1B Kiwi World Cup. Lost Hills 2020
- *Contest Director 1989 U. S. Free Flight Champs in Taft and 1990, the first in Lost Hills.
- *Contest Director Southwest FAI Challenge in Boulder City 2004 -2016
- *Contest Director Bob White Max Men International, 2015 to Present
- *NFFS Membership & Subscriptions Manager 1977-1979
- *NFFS Model of the Year Chairperson 2006-2008
- *NFFS Patrons Program Chairperson (Symposium Fund Raising) 2012-2014

- *Free Flight Team Selection Committee Representative for District 10 since 2013.
- *Organizing Committee for Team Selection Finals 2014- Present
- *Organizing Committee for 2019 World Championships in Lost Hills
- *President Lost Hills Free Flight Model Airfield Association since 2017
- *Designed logo for 1993 World Champs, Lost Hills
- *Co-designed Logo with AMA Graphics Department plus Field Signage & Graphics for 2019 World Championships, Lost Hills
- *Drafted plans for "Model Aviation" including Dave Parson's Cathexis FAI Power Model
- *Drafted several three views for 1979 World Championships plan book including Brodersen's "KMA" and the artwork used for the cover.
- *Drafted plans for Champion Models and Starlink
- *Contributed several model designs to the NFFS Plan Catalog.
- *Designed "Busy Bee" and prepared "Model Aviation" plans and article with John Oldenkamp to promote the new Pee Wee 30 event. "Busy Bee" was later produced as a kit by Campbell's Kits



SDO May Contest Results

(Submitted by Mike Pykelny)

May 2nd

Coupe-	1 st /tie 3 rd	Greg/John H Don
CLG	1 st 2 nd 3 rd	Tim John Swain Mike
HLG	1 st 2 nd 3 rd	Tim Clint Brad
Power	1 st 2 nd 3 rd	Hal Mike John S

May 23rd

OT/NOS	1 st 2 nd 3 rd	Henry Kruse David Wade Mike J
CLG	1 st 2 nd 3 rd	Tim Mike P Mike J
Power	1 st 2 nd 3 rd	David W John S Don



Orbiteer T-Shirts

The new 2022 T-Shirts are a big success. Since receiving them the first part of April we have sold half of our inventory. John Hutchison's clever logo from the past, bright colors and the reasonable price (\$15) has made them very popular. We hope to continue this trend both to Orbiteers, other flying clubs and our out-of-town contests especially at Lost Hills. We sincerely want to thank Ronnie Espolt from Apple Valley, California for purchasing shirts for junior flyers in his area.

Happy Flying

Michael Pykelny and Linda



Greg and John Hutchison – Perris CA





San Diego Orbiteers

Flying Schedule 2022

Taibi Field Perris, Ca

<u>Primary Date</u>	<u>Rain Date</u>	<u>Event</u>	<u>CD</u>
January 23	January 30	P-30/Glider/Power	John M
February 20	February 27	Coupe/Glider/Power	Don
March 20	March 27	OT/NOS <i>Cancelled</i>	MJ
April 24		P-30/One design Event	Mark
		Glider/Power	
		Oldenkamp Memorial	
May 22	May 30	Coupe/Glider/Power	MP
June 12	June 26	OT/NOS Rubber/Glider/	MP

July 10	July 17	P-30/Glider/Power	Mark
August	OFF	Perris Fun Flys	
September	16-18th	Free Flight Champions Lost Hills	
September 25		Coupe/Glider/Power	John M
October 16	October 23	OT/NOS Rubber/Glider/Power	
November 12,13		Dual Club, Lost Hill, Ca.	Don
November 20	November 27	P-30/Glider/Power	
December 18		OT/NOS Make-up	

MP 06/22

June 12TH Monthly

(Reported by M.Pykelnny)

OT/NOS Rubber Six Flyers

Mike J
John S
Don

CLG Five Flyers

Tim
Chris
Brad

HLG Five Flyers

Tim
John M
Brad

Power Three Flyers

Don
Clint
Mike P

Twelve flyers

First flight 7:30 AM

Prize giving 11:30 AM



Mike Jester – OT/NOS Rubber



Tim Batiuk – Disc HLG



Don Bartick – Power



John Merrill – Disc HLG



Mike Pykelnny – Power



Chris Reck – Caplt. HLG

Held at the home of President Mark Chomyn, with only 7 in attendance, and 1 by phone. After a wonderful dinner barbequed by Mark with a lot of great support from Nancy, the meeting was **Called to Order** at exactly 7:00 p.m.

Minutes of the previous meeting held April 24th were approved as published, with the exception of the date: it was incorrectly noted as 2002, not 2022. Secretary should be fired.

Treasurer's Report was approved as provided to the board. Many thanks to Howard for his diligence and hard work!

Membership Report – it was noted that the brochure rack at Discount Hobbies remains stocked with club info, otherwise no news this quarter.

Old Business:

Still on the lookout for an alternative flying field, ideally in San Diego. Please let a club officer know if you have a place in mind that may be suitable.

More discussion regarding an alternative indoor flying site, no conclusions at this time. Looking into the possibility of one of the gyms at SDSU.

Grossmont College gym: hope is not lost, looking at possibility of Fall Semester there.

Discussed the awards banquet that has been delayed for a few years. Looking into same venue in January. Will revisit topic at next meeting.

T-shirt sales: question arose as to the possibility of doing another order. Maybe later in year.

New Business:

Status of Taibi Field in Perris-the owners are in New York, and it was found to have an extended development agreement after Mark looked into it. Nothing appears to be imminent.

Make the Pitsco Raven an annual event with the P-30 Memorial contest? It was decided we would fly the event again in 2023, but we did not commit beyond that. The issue came up that the prop didn't want to free-wheel, which added a lot of drag and reduced flight times. Therefore, it was decided the **ONLY** modification would be change the prop shaft assembly to allow it to free-wheel, but the plane **must** use the prop supplied.

Fun Fly contests in July/August, same format? Normally the club suspends contests for those 2 summer months due to expected heat issues. However, it was decided to go ahead and schedule a July contest on the 10th, but change the contest times to 7:30 to 11:00 to help alleviate the heat issues. Will decide about August as it approaches. The July contest will feature the P-30, along with power and glider events.

There will be a Big September contest, featuring a bigger payout for the Coupe event.



Contest Reports:

John Hutchison talked about the Scale Staffel 2-day event held recently. There were 16 entrants over the 2 days, a good turnout. The contest had great weather, and was lots of fun.

Open Discussion:

Still seeking candidates for the position of Scale Staffel President...any volunteers?

Still looking for a new Orbiteers webmaster. Kathy says it's a pretty easy job, with very little time commitment. Any volunteers?

Another website was bought up, called MaxfliArt by Tom Hallman. He specializes in Free Flight, and has YouTube videos as well.

Good of the Order:

Schedule the third quarter meeting – will be September 21st at the Bartick home.

Kathy's one-act play that was to take place in Clairemont had to be postponed until the Fall.

Call for Adjournment: Meeting adjourned at 8:51 p.m.

Respectfully submitted by John R. Merrill, Amateur Secretary (should be fired!)



Bernie Crow, June 12TH Monthly

Tristan Mayer, June 12TH Monthly →





Perris Flight Line – June 12TH Monthly



Daniel Guo



Dave Wade



John Merrill and Mark Chomyn



John Swain →

← Doug Mayer



Three-Dimensional Electronic Flying Microchip

The size of a grain of sand, dispersed microfliers could monitor air pollution, airborne disease, and environmental contamination.

Northwestern University, Evanston, IL

Engineers have added a new capability to electronic microchips: flight. About the size of a grain of sand, the new flying microchip (microflier) does not have a motor or engine. Instead, it catches flight on the wind — much like a maple tree's propeller seed — and spins like a helicopter through the air toward the ground. The microfliers also can be packed with ultra-miniaturized technology including sensors, power sources, antennas for wireless communication, and embedded memory to store data.

By studying maple trees and other types of wind-dispersed seeds, the engineers optimized the microflier's aerodynamics to ensure that when dropped at a high elevation, it falls at a slow velocity in a controlled manner. This behavior stabilizes its flight, ensures dispersal over a broad area, and increases the amount of time it interacts with the air, making it ideal for monitoring air pollution and airborne disease.

To design the microfliers, the team studied the aerodynamics of a number of plants' seeds, drawing its most direct inspiration from the *tristellateia* plant, a flowering vine with star-shaped seeds. *Tristellateia* seeds have bladed wings that catch the wind to fall with a slow, rotating spin.

The team designed and built many different types of microfliers, including one with three wings, optimized to similar shapes and angles as the wings on a *tristellateia* seed. To pinpoint the most ideal structure, full-scale computational modeling was done of how the air flows around the device to mimic the *tristellateia* seed's slow, controlled rotation.

www.techbriefs.com

Based on this modeling, the team then built and tested structures in the lab, using advanced methods for imaging and quantifying patterns of flow. The resulting structures can be formed across a wide variety of sizes and shapes.

To manufacture the devices, the team drew inspiration from another familiar novelty: a child's pop-up book. The team first fabricated precursors to flying structures in flat, planar geometries. Then, they bonded these precursors onto a slightly stretched rubber substrate. When the stretched substrate is relaxed, a controlled buckling process occurs that causes the wings to "pop up" into precisely defined three-dimensional forms.

The microfliers comprise two parts: millimeter-sized electronic functional components and their wings. As the microflier falls through the air, its wings interact with the air to create a slow, stable rotational motion. The weight of the electronics is distributed low in the center of the microflier to prevent it from losing control and chaotically tumbling to the ground.

In demonstrated examples, the team included sensors, a power source that can harvest ambient energy, memory storage, and an antenna that can wirelessly transfer data to a smartphone, tablet, or computer. The team outfitted one device with all of these elements to detect particulates in the air. In another example, they incorporated pH sensors that

could be used to monitor water quality and photodetectors to measure Sun exposure at different wavelengths.

Large numbers of devices could be dropped from a plane or building and broadly dispersed to monitor environmental remediation efforts after a chemical spill or to track levels of air pollution at various altitudes.

The physically transient electronics systems use degradable polymers, compostable conductors, and dissolvable integrated circuit chips that naturally vanish into environmentally benign end products when exposed to water.

For more information, contact Amanda Morris at amandamo@northwestern.edu; 847-467-6790.



About the size of a grain of sand, the new flying microchip does not have a motor or engine. Instead, it catches flight on the wind and spins like a helicopter through the air toward the ground. (Image: Northwestern University)

SAN DIEGO ORBITEERS
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PHOTO CREDITS:

Page 2, 4, 5, 8, 10, 12, 14 - Arline Bartick
" 3, 4 - Mike Jester
" 5 - John Merrill
" 6, 7 - Bill Booth



SUBMISSION CREDITS:

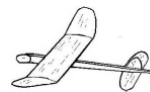
Mark Chomyn
Mike Jester
Mike Pykelny
Linda Piazza
John Merrill
Bill Booth



WHAT'S HAPPENING

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JULY 2022



July 10 -

San Diego Orbiteer Outdoor Monthly
Taibi Flying Field, Perris CA, 7:30 am.
Events: **P-30 / Glider / Power**