



Vol. 2, No. 1
Spring 2023

The Newsletter of the Helicopter Conservancy, Ltd.

FIVE BY FIVE

A MESSAGE FROM THE PRESIDENT

Snow blankets the ground as I look out my window on this chilly April morning. But with luck, it will all have melted away by the time you read this. Springtime snow showers aren't unexpected to those of us living in Wisconsin, where blizzards have bedeviled many a flight plan even in June. Yet spring is a time of renewal, and the promise of warm weather after what has been an especially long winter means a return to our hangar, where projects have waited patiently, dormant since the late fall.

And we have a lot to look forward to this year, beginning with work on our VR Huey Mission Simulator, which is making considerable progress and is now partly functional, as we describe in this issue. Efforts to renovate our hangar will continue, with the goal of eventually having the hangar insulated and heated, which will allow its use year-round, through weather foul and fair.

This spring also marks the renewed publication of this newsletter, which, regrettably, I'd had to set aside last year to accomplish other pressing tasks. To strike a better balance, we'll be publishing *Hoverfly* annually rather than quarterly, at least for now. I'm sorry about this, as I know you look forward to the articles we print in each issue, but it is the best way to avoid being spread too thin. On a brighter note, I'm happy to announce that we've formed an editorial board for *Hoverfly*, which will help to bring you more stories and news of interest.

I hope you enjoy this issue—come rain, snow or shine.

Kenneth Eward
President

HeloMuseum@gmail.com

INSIDE THIS ISSUE:

<i>Five by Five</i>	1
<i>Around the Hangar</i>	1
<i>Black Rain</i>	4
<i>Short Final</i>	8

AROUND THE HANGAR

CONSERVANCY NEWS AND EVENTS

Members of the Osceola, MN division of the Naval Sea Cadet Corps visited our hangar last October to try out our VR Huey Mission Simulator. After attending a "ground school" lecture on the principles of helicopter flight, led by retired navy helicopter pilot Brandon Montanye, the cadets applied their knowledge in the simulator. Retired Huey pilot Mitch Madison was also on hand to teach the finer points of pi-

loting and to talk about his own career in the US Army. It takes teamwork to crew a helicopter, and these cadets enjoyed the challenge, paired with these two veteran pilots who coached them through a variety of simulated missions including search & rescue in difficult terrain, resupply runs and even a dinosaur roundup. Everyone had a great time, and who knows—maybe a future pilot or crew chief will emerge from this event!

AROUND THE HANGAR *(continued)*

A Naval Sea Cadet from Osceola, MN learns the ropes of flying a UH-1H “Huey” from retired naval aviator Brandon Montanye during a demo of our VR Huey Mission Simulator in October 2022. (Helicopter Conservancy)

Cover photo: a CH-47F Chinook of the US Army 101st Airborne Division perches high in the Bavarian Alps on an exercise in October 2020. Cold weather is a helicopter pilot’s best friend at high altitudes, where lift is reduced in the rarified air. Cold air is denser than warm air, increasing the lift the rotor system can generate. (Staff Sgt. Garrett L. Dipuma/ARNG)

The appearance of U.S. Department of Defense (DOD) images does not imply or constitute DoD endorsement.

Our volunteers made considerable progress building the sim in 2022 and it will remain our focus during the 2023 work season. And while much remains to be done, the simulator is now partly operational. When finished, it will accommodate a full crew of four who will participate in realistic missions, working together as a team and led by veteran pilots. Expected to be completed in 2024, this traveling exhibit will be free to the public.

Hangar Renovation

When we moved into our current building in late 2017, we suspected we might have a little work ahead of us in fixing it up. Just how much work was revealed the following spring, when melting snow seeping underneath the hangar door combined with spring showers leaking through the roof to create an indoor

lake. Mitch Madison hit on the idea of using foam swimming pool noodles to form a watertight seal underneath the door and bought the entire inventory from the local Walmart. It’s worked quite well and the lake hasn’t returned. Thanks to generous donations in 2021, we were able to have the roof resealed last summer, which stopped the roof from leaking. The hangar is now a much drier place to work and to keep our helicopters. We plan to add insulation and heat as donations permit in the months and years ahead.

2022 Christopher J. Daly Award

Named for former Secretary Chris Daly, an outstanding model of service to his country, his community and to fellow veterans during his lifetime, the Daly Award is given each year to honor a volunteer showing a deep commit-



At left: Matthew Britton configures simulator computer hardware in preparation for a flight demonstration. At right: retired army pilot Mitch Madison takes Sea Cadets for a pre-flight walkaround. (Helicopter Conservancy)

ment to our mission and to our community. Volunteers are eligible to receive this award once every five years. We're proud to announce that Brandon Montanye was chosen by the board of directors as our 2022 recipient of the Christopher J. Daly Award, given in recognition of his dedication and hard work. Brandon is a retired naval aviator who, when not volunteering his time with us, teaches economics and history at Chisago Lakes High School in Lindström, MN.



Rosemary Marusak tests the simulator landing light controls. (Helicopter Conservancy)



2022 Daly Award recipient Brandon Montanye (Brandon Montanye)

Donor Support in 2022

We received \$950 in donations in 2022 and would like to thank the many individuals, families and organizations who have supported our work. As a volunteer-run 501(c)(3) charitable organization, we rely on your support for projects like the Huey Mission Simulator and publication of this newsletter, not to mention paying the bills to keep our hangar open. Your contributions past and present make what we do possible and we greatly appreciate your help.



BLACK RAIN

The author learns that Vietnam's weather could be a fierce adversary.

By Stephen J. Piotrowski

The men of Charlie Company were sitting around the hooches, doing the things soldiers always do when they have a little spare time. We were cleaning rifles, playing cards, writing letters, trying to impress each other with tales of manly feats from our previous lives. We'd been sitting around with the proverbial finger up our arse for days.

The monsoon was just beginning, causing afternoon thunderstorms. Monsoon rains amazed me; it rains so hard that you cannot see thirty feet in front of you and then, suddenly, it stops. The clay soil inside the wire of the base camp, stripped of all vegetation, turns to greasy mud about six inches deep. The rain stops, the sun comes out, and everything dries out in fifteen minutes. The guys who'd extended their tours and been in Vietnam for a over year kept telling us that we "ain't seen nothing yet." Like your grandfather talking about the olden days, every fire-fight and every mountain we humped was nothing compared to back in '68.

On this afternoon, we were hanging in the hooch playing poker and swapping lies about our adventures back home. Robby had just finished telling about a time he'd gotten stoned and gone surfing. He did not stay up on the board very long, falling off was easier than swimming and finding his way back to it. We were rolling off our bunks laughing when Westy came running into the hooch yelling, "Saddle up, we are on our way to Ban Me Thuot."

Immediately, we bombarded him with questions: where, who, why, how. Mostly, we wanted to know where exactly Ban Me Thuot was, and why we were going there. All he knew was that he was pulling radio watch in the Company office when word came that a unit from the Fourth Infantry was in trouble up by Ban Me Thuot. The description used was "up by Ban Me Thuot," so he assumed it was north somewhere. The "who" was clearly some unit from the Fourth Infantry. The rest wasn't part of the Boonie Rats' need to know

package. Pack up and don't worry about it. I didn't think this would be exactly a Chamber of Commerce sponsored vacation trip up north, since the radio traffic indicated that the 4th Infantry unit was really getting clobbered. Still, it wasn't all bad; it would be cool to get to Ban Me Thuot, since my older brother Alan had the comfortable duty of being a bird dog spotter plane crew chief from Christmas of 1966 to just before Tet of 1968.

I grabbed my ruck, ran a radio check, made sure my rifle was loaded and oiled, and headed over to the Company hooch. I wanted to get there quickly. Captain Crowe, our Company Commander, was a lifer's lifer, and he'd already have orders galore flowing over the radios to make sure we got everyone out to the chopper pad for movement. Without acknowledging my devotion to duty, Captain Crowe started yelling for me to get the RTOs up on Company freq telling the platoon and squad leaders to get up to the Company Hooch five minutes ago or sooner. Most of the platoon leaders were there already, and I was surprised that he wanted the squad leaders too. In life, shit flows downhill, and in the Army so does information. Usually the CO briefed the platoon leaders, who briefed their squad leaders, who briefed the squads. Like the kids' game "secrets" where the first person writes down a short statement, whispers it to the next person, who passes it to the next and so on. By the time the message makes its way around the circle, it doesn't sound anything like the original. The information distribution system in the infantry worked much the same way: the Battalion CO had detailed information from above; the Company CO got most of the details from him. He gave a little less to the Platoon Leaders, who gave some of that precious information to the squad leaders, who sifted what little substance remained down to a few seeds and stems for the grunts in the squad. That left the average grunt short of having any idea of what was going on, but gave him one more thing to complain about, therefore adding to the favorite pastime of all soldiers, bitching.

It took about thirty minutes to get the Company organized and out to the pad where the choppers were warming up as we approached squad by squad. The spray of dirt and dust

from the chopper blades rendered our morning showers useless. It was only a few hundred meters from our hooches to the chopper pad, but getting a hundred men packed and moving in a half hour is an impressive accomplishment regardless of distance. Task Force South used us as a reaction force for all of II Corps, which meant that we got these sudden calls to help other units in trouble on a regular basis. We were supposed to be ready to move out on a moment's notice, and by Army standards, the half hour it took to get ready and on the pad fit the Army definition of immediate departure. We could have had a squad or two in the air quicker, but putting them out there alone would have amounted to providing lambs for slaughter. We might have been there before the choppers warmed up if they had said "move light," but they told us to be ready to stay out for a week, so it was full rucks and junk. The biggest delay was the order for full water and ammo, which took a little more time to locate and secure.

We broke down into two lifts, with the CO going in on the first lift. I wasn't a big fan of that hero stuff. If the CO was going in on the first lift, I was going too, since I was his Radio Telephone Operator. The umbilical cord of my radio handset connected him to the outside world and me to him. I never got to play telephone operator like the ones in the states who asked for the deposit of another 25 cents, but I did a lot of whispering into the radio handset over the course of my year.

The afternoon rains had not yet hit, so the choppers were whipping up clouds of dust and we were glad to get up into the air. We gained altitude and the other half of the company turned into ants, soon fading out of sight. I listened over the radio to the chopper pilots. It sounded like it would take less than a half hour to get near the landing zone at Ban Me Thuot. I was enjoying the view from my seat in the door of the chopper, watching the jungle pass beneath us. The variety of shades of green overwhelmed me: no way Crayola could ever come up with the 126 types of green it would take to capture the subtle differences in tone and shade you'd need to draw the jungle accurately.

The afternoon rains had not yet hit, so the choppers were whipping up clouds of dust and we were glad to get up into the air.

The helicopter entered the clouds and at the same instant began shaking like a cat after a bath. It felt and sounded like we'd run into a wall of metal chains . . .

BECOME A MEMBER!

Visit our website to learn how to join or to become a sponsor:

HeloMuseum.org

I kept the radio handset hooked to my rucksack shoulder harness so I could monitor it at all times. I was hooked on staying informed by listening to radio traffic over the "Pric 25" military communication radio. There was a steady stream of conversation between the pilot and co-pilot on our bird. I'd been monitoring the routine conversations within the flight group, but now I noticed more tension in their voices. I listened closely and heard them discussing a "big black wall". I couldn't figure out what they were talking about until Westy tapped me on the shoulder and pointed towards the front of the chopper. I followed his finger and saw the wall: thunderclouds stretching from near the ground to twenty thousand feet. Clouds billowing out like the dirty, smoking, exhaust from steel mill smokestacks forming black balloons in the sky. Lighting shot out of the clouds as if Thor was working his hammer with maximum fury. The black of the clouds was active, alive and threatening, unlike the dead black of moonless nights. The evil looking clouds had a menacing feeling not unlike an old cemetery on Halloween. The chatter from the pilots hammered home the idea that choppers and thunderstorms were not a good mix.

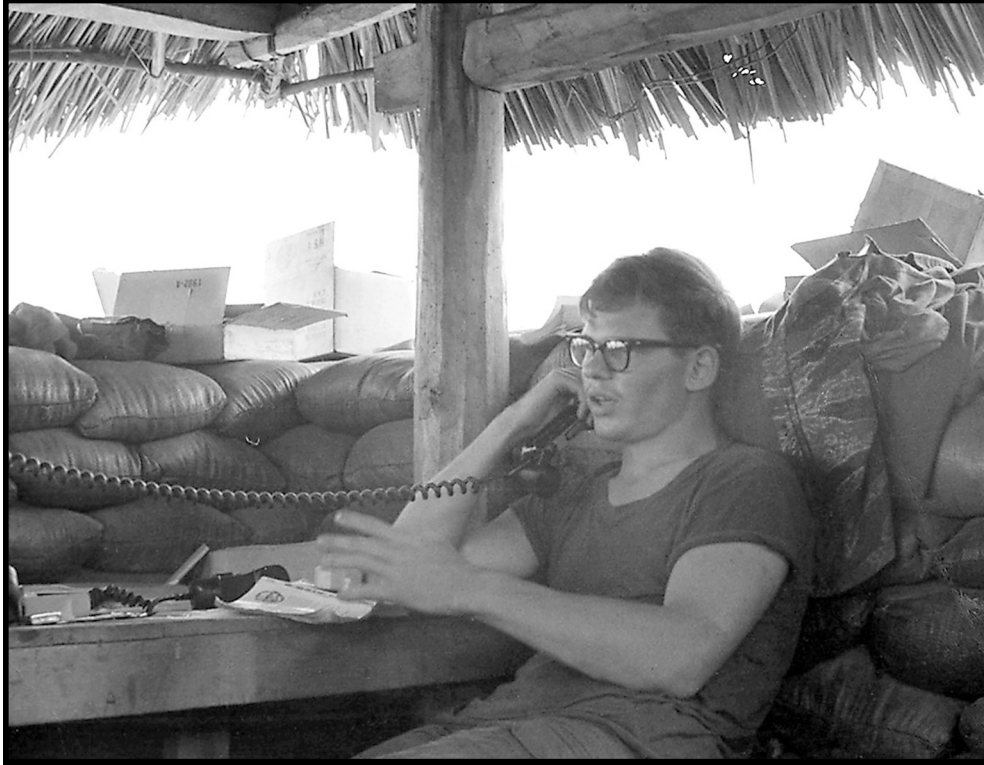
I listened as the pilots debated going around, through, over or under the fast approaching cloudbank. They knew they could not go over; the birds were too loaded to gain that much altitude. They could go around, but it would add an hour to the flight. From the information they had, it didn't seem like the storm would be past Ban Me Thout by then, so they'd still have to fly into big clouds from the other side. They couldn't go under it; the volume of rain would make visibility too limited to continue the formation flight so close to the ground. We were still several hours' walk from a landing zone near the battle site. It didn't make a lot of sense to drop reinforcements into the area piecemeal and hope we could get there quickly enough to help out the Fourth without getting ourselves ambushed by the forces ruining their day. The only choice was to go right into the clouds.

I wasn't a pilot, and until I joined the Army, I'd only flown once in my life. I didn't think that flying into a cloud would be a big deal.

The white puffy things I remembered seeing while laying on my back in the summer looked like soft cotton balls. Okay, so these were a lot darker and meaner looking, but still, clouds are just water vapor aren't they? Then again, if they are just water vapor, what causes the lighting I was seeing? Ok, maybe there was a bigger problem here. The voices of the chopper pilots told me clearly there was something more involved. The clouds undoubtedly looked ominous with their towering black stacks. Like the ammo dump at Boa Loc after the VC mortars hit it, sending up black smoke for days. Replacing the red glow underneath the black smoke was lots of lightning shooting through the clouds towards the ground.

We were almost at the wall of clouds. Our chopper was the third one in formation. Westy and I leaned out the door to watch the first two birds enter the clouds. I was listening to the pilots, and I could hear the pilot of the first chopper shouting that he couldn't hold it and he was coming out. Immediately the second bird's pilot yelled that he was turning left and coming out. The first pilot shouted at him to turn right because he was turning left and he needed to turn right to avoid each other in the zero visibility. Almost to the cloudbank, the pilot of our chopper began a turn that had the bird at a ninety-degree angle to the ground. I found myself looking straight down at the ground and at the same time, I could feel a wash of rain hitting the back of my head through the open top door of the chopper. The helicopter entered the clouds and at the same instant began shaking like a cat after a bath. It felt and sounded like we'd run into a wall of metal chains and the bird vibrated as if the rotors were hitting the treetops of the jungle canopy. I frantically searched for the other choppers, worrying that the extremely limited visibility had caused us to crash into each other. Since there was nothing else visible, I assumed it was the thundercloud making us bounce and roll like a leaf in a dust devil. I wasn't sure whether I should feel relieved by our aloneness or panicked because we shook so badly when trying to fly through a little water vapor. I began to wonder just why I liked riding in choppers so much. There had been a fair number of unpleasant experienc-

es aboard these sheet metal coffins. I remembered the Chinook chopper that almost crashed with the rest of my platoon and me on board. I thought about the chopper ride that ended with me dropping off from twenty feet because the pilot was taking fire. A streak of lightning reached out for us continued down to the ground. For more than a few seconds I wondered if we were going to stay up in the air long enough to get out of the cloud bank.



The author as an infantry radio operator in 1969 (Stephen Piotrowski)

Then, suddenly, we were back in the sunshine with the clouds

disappearing behind us. The shaking of the bird stopped. The shaking of this passenger didn't. I didn't want to check out the others. Someone would lose macho credibility, and I didn't want it to be me. We circled for a while waiting to see if there would be an opening in the clouds that would allow us to help the Fourth Infantry. We started to run low on fuel before any change in the weather. The still unknown unit from the Fourth called in to say the VC had broken off their attack. They didn't need our help today. We headed back to Boa Loc just in front of the storm. We made it to our barracks just before the wall hit full force. The monsoons were coming on stronger; it rained for over an hour. You couldn't see a thing while it was raining, and before long, water started running across the floor of the hooch. It was still a hell of a lot better inside the mostly dry hooch than it had been at three thousand feet inside the clouds.

I never did get to see the base at Ban Me Thuot. However, a few months later we went down to Phan Thiet and Phan Rang, so I was able to walk across some of the territory my brother had flown above after they transferred him late in his tour. After I got home, I found

out that Alan had flown regularly over much of the area I walked through around Boa Loc. Thinking about the effect of clouds on aircraft, I wondered who'd had the better duty.

Stephen Piotrowski is the author of No Where Man, the story of his return home after a tour of duty in Vietnam as an infantryman in the 173rd Airborne Brigade. A lifelong Wisconsin resident, Mr. Piotrowski has served as executive director of The Highground Veterans Memorial Park and in other positions helping fellow veterans. Black Rain first appeared in Issue Three of The Deadly Writer's Patrol, a veterans' literary magazine published 2006-2021, to which Mr. Piotrowski was a frequent contributor. Mr. Piotrowski and his wife Lynne live in Madison.



Tweet this story:





**Helicopter
Conservancy
Ltd.**

Preserving helicopter history

Board of Directors

Kenneth Eward, president
Les' Melnyk, treasurer
Rosemary Marusak, acting secretary

Office and Mailing Address

569 18th Street
Chetek, WI 54728
USA

Hangar Address

Hangar 1-2
New Richmond Regional Airport
New Richmond, WI

Telephone

(715) 418-9179

E-mail

HeloMuseum@gmail.com

Website

HelicopterConservancy.org

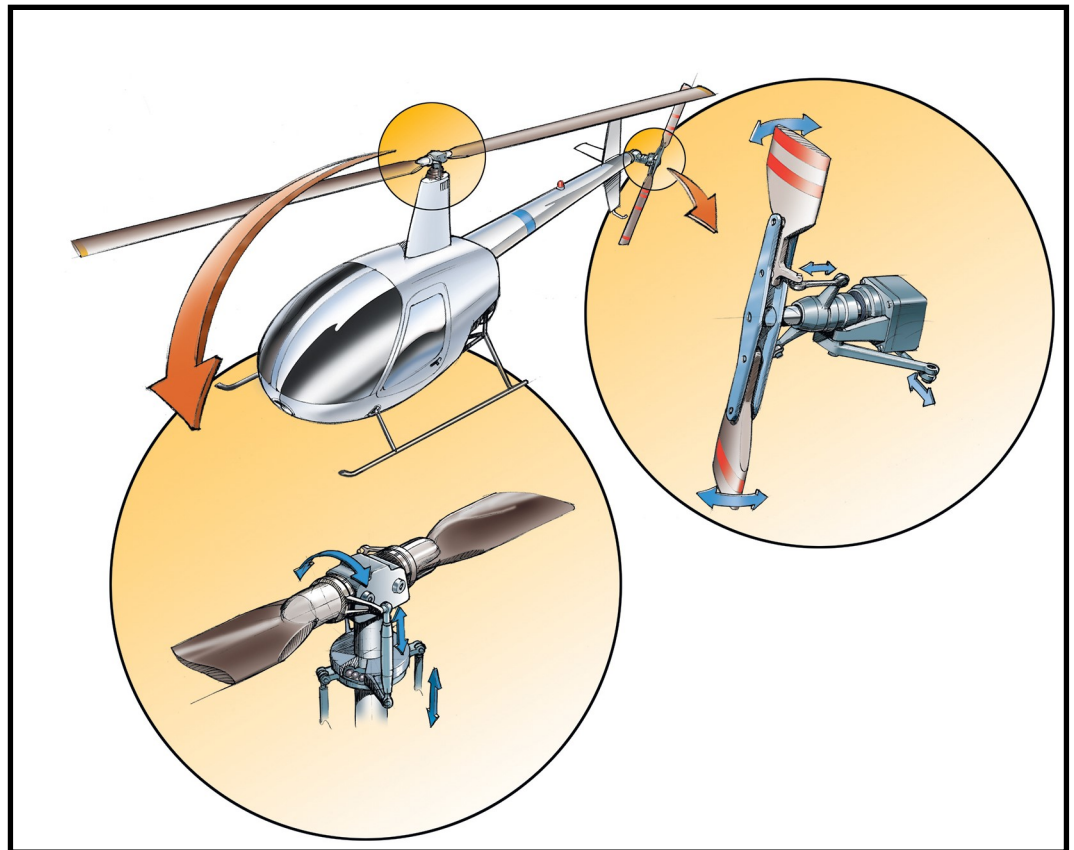
The Helicopter Conservancy is a nonprofit, tax-exempt organization formed under section 501(c)(3) of the Internal Revenue Code.

All inquiries about the newsletter, membership, donations and other matters should be sent in writing by e-mail or to our mailing address above. We'd like to hear from you and promise a reply within five business days.

Follow us on
Social Media:



SHORT FINAL



Rotor pitch control in the Robinson R22 (Charles Floyd)

Illustrator and pilot Charles Floyd has always been fascinated by the way things work. This interest has followed him through a career that has spanned faculty appointments at the University of North Carolina and at Carolina State, a position as an art director at *National Geographic* magazine, and ultimately to his current work running his own illustration and graphic design studio.

Much of Floyd's artwork is devoted to aeronautical subjects, drawn for clients that include NASA and the Aircraft Owners and Pilots Association (AOPA), members of which may be familiar with his illustrations from AOPA's *Flight Training* and *Pilot* magazines.

Floyd is also a private pilot with 500 hours of flight time, experience which has proven invaluable in his aviation technical illustrations, several of which are devoted to unpacking the intricacies of helicopter design and flight.

The above information graphic, which illustrates the mechanics of rotor pitch control in the Robinson R22, is one of 160 hand-drawn illustrations commissioned for the 2008 book *How Stuff Works* (Chartwell Books), authored by Marshall Brain. It's one of three helicopter illustrations drawn by Floyd for this book.

Charles Floyd lives and works in Asheville, North Carolina. His design studio is on the web at: CharlesFloydDesignAndIllustration.com.

Click [here](#) to receive *Hoverfly* by e-mail or visit our website to subscribe.