

HILLER BRIEFINGS

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EDUCATION AT THE HILLER TAKES OFF WITH NEW EXHIBITS, JUMBOJET COCKPITS AND MORE COMMUNITY OUTREACH

Increased student field trips are a factor in higher visitor levels during an economic slowdown that cut attendance at many of the nation's museums.

Mindful of his own career start as a teenaged helicopter inventor, Stanley Hiller envisioned the Hiller Aviation Institute as a vehicle to educate young people about the possibilities of air transportation. For him, the museum was a learning institution long before it opened in June 1998.

Instruction on an actual flight deck like the 747 at right is a new attraction. Here, retired United Capt. Bob Beavis briefs young William Turner. Below center: The first-class 747 section is often used for community meetings. Below right: Boys & Girls Club members try out the helicopter flight simulator.

Today, the need to enrich the nation's transportation industry with a new generation of technology-wise entrepreneurs, designers and planners has never been a higher priority. Long-term planning essential to solve problems of congestion, finite resources, seat-mile cost, safety—and now security—cry out for new thinking and new people with informed ideas.

To the institute's founder, such growing needs in society always



store, and suggest ways to apply the experience upon returning to classrooms.

After their Hiller docent-guided field trip, the kids receive from the institute Student Family Certificates to take home. Presenting the certificate at the museum on any Saturday, the entire family is admitted free of charge.

Tours Growing

During the period October 2000 and July 2001, popularity of the Hiller for student field trips began to take off. About 130 schools toured, bringing nearly 4,000 students and 1,400 teachers, and the numbers are already rising with over 2,600 kids appearing in the latest six-month tally. Field trips are normally scheduled Monday through Friday.

Jetliner schoolrooms

A hot new attraction for students is the addition of an indoctrination tour of the museum's recently-installed jetliner flight decks. An entire forward section of a 747, with its two-decker, fully furnished first-class cabin, becomes a reality classroom.

Building the institute's academic program is the task of Marion McDowell, Director of Education, right. She was formerly Deputy Superintendent of Sequoia Union High School District in the San Francisco Bay Area.



meant new career opportunities, and Silicon Valley Silicon Valley is the right place to start young.

But the challenge is daunting. Schools will need a lot of help from institutions like the Hiller if they are to rise from the dismal last place California students in grades four to eight occupy nationally in science subjects.

The Hiller Aviation Institute managed in recent months to increase its educational programs at all age levels. Despite a tough economic climate, the institute's Science Education Community Outreach Program (SECO) received funding from companies, foundations and individuals such as Oracle Corp., the Dresher Foundation, Peninsula Community Foundation, Applied Materials of Santa Clara, Mary Jane Brinton, and

the Wilson Sonsini Goodrich & Rosati Foundation. Grants help cover the cost of field trips to the museum, especially useful for students from underserved communities of the San Francisco Bay Area.

It's an exciting way to learn about the history, science and technology of flight. A field trip to the museum allows K-12 students to use what they've learned in math, science, social studies and language arts in an authentic, hands-on setting.

Curriculum Guides designed for the institute encourage student problem-solving, while Field Trip Guides for teachers and program "Flight Plans" offer interesting and challenging learning activities based on exhibits in the museum.

In SECO, the institute contacts at the beginning of each school semes-



ter more than 160 district and county-office superintendents in 11 counties. They're invited to Educators' Open Houses at the institute to review museum facilities and programs. As

Visitors are briefed by docents, learning the instruments and what it's like flying big planes. Talks and a video geared to student ages touch on flight performance. *Continued next page*

Right: A new 737 nose section was recently installed on the mezzanine. Now the busy Restoration Center is preparing simulated controls and passenger flight accommodations for the mockup forward section of Boeing's early supersonic entry, far right. The SST interior will open later this year.



teachers call in field trip reservations, they receive a package of materials to help prepare students for what's in



EDUCATION TAKES OFF continued

A pilot for 43 years, retired United Capt. George Mendonca is enthusiastic about his flights with kids like Tyler Mason, 11, and Tiffany Valladares, 9, as recently covered by the *San Jose Mercury News*. For information about the Saturday flights, go to www.hiller.org.

School field trips to the Hiller can connect with classroom aeronautical projects, using special Curriculum Guides from the museum.

Back inside the museum, accessed from the mezzanine, is another surprise: a uniquely mounted, complete cockpit section of a Boeing 737 airliner. While tour members wait their turn for the two planes, a museum instructor holds an air traffic session on the mezzanine overlooking operations at the San Carlos Airport. Listening to actual airport tower transmissions, students come away with a perception of air traffic control in the real world of aviation.

Supersonic cockpit next
Later this year, the museum's giant supersonic airliner forward section will be another spectacular instructional scene, where visitors can sit in the pilots' seats of a futuristic airliner.

Hundreds of kids really fly!
It's a common question when young people hear of the museum's educational program: "You mean kids can really fly?" Hundreds do. Thanks to the Young Eagles program of the Experimental Aircraft Association's foundation, Hiller staffers arrange flights for children 8 through 17 with volunteer pilots flying their own planes. Young Eagles have logged 750,000 flights, with 3,000 of them arranged by the museum's Marketing



Director, Willie Turner. The 20-minute flights are free and happen the third Saturday of every month.

Collaboration with college
Hiller Aviation Institute is working with Silicon Valley colleges, formulating plans for collaborative activities to encourage students toward aviation and flight technology careers.

After initial programs with Menlo College, a new step has been taken with College of San Mateo leading to a variety of joint CSM-Hiller projects.

Among them was a recent "Career Day" held at the museum as a collab-



oration of CSM, Hiller and San Mateo Union High School District. The tours and lectures centered on Airframe and Powerplant careers offered by the college, and other avenues of interest to high schoolers, including piloting and technology. CSM has an active "Community Involvement" program which enables its students to serve in their community and pursue their

educational experience beyond the campus. It's a good dovetail with the goals of the Hiller.

In the works are such activities as CSM students interning with museum Restoration Center Director John Obertelli and Volunteer Director North West, as well as a joint aviation television program of PBS quality with the college's KCSM-TV.

At right: Founder Stanley Hiller and Executive Director Bill Kozlovsky confer on collaboration with President Shirley Kelly of the College of San Mateo.

SAN FRANCISCO AERONAUTICAL SOCIETY AWARDS STANLEY HILLER MEDAL OF AVIATION ACHIEVEMENT

Photos far right: Brig. Gen. John F. Kinney appeared at the Hiller with a Grumman Wildcat and an account of his WWII adventure as a Wake Island defender and as a POW. *Center photo:* He wears the garb of a Chinese communist who helped after his daring escape. (The Wildcat courtesy of its owner, David Morss).

On May 3, 2002, the varied accomplishments of aviation pioneer Stanley Hiller, Jr., gained new recognition with the award of a Medal of Achievement by the San Francisco Aeronautical Society. The society is an affiliate support organization of the San Francisco Airport Commission Aviation Library and Lewis A. Turpen Museum. Society President Turpen said Hiller was chosen for the honor



to acknowledge his lifelong contribution to the progress of aviation. The award cites his personal inventions which facilitated vertical flight, his leadership of one of the world's most creative aviation research and manufacturing companies, and his more recent efforts in building public awareness of air transportation history with the creation of an educational aviation institute and museum.

"Pick yourself up and start all over again": Stanley Hiller, 17, frames his first helicopter, and then celebrates his 19th birthday by crashing in a co-axial test bed. His company got over it, to become one of the world's three major producers of vertical flight aircraft, and a principal source of innovation.



JOHN KINNEY: BORN TO TO FLY, BORN TO BEAT THE ODDS



A vivid account of being in the wrong places with the right attitude.

Brig. General John F. Kinney, USMC (Ret.) has a story to tell about the battles of Wake Island that made his audience at the Hiller glad they hadn't been on that besieged fortress in the Pacific. In company with a Grumman Wildcat fighter similar to the one he flew, Gen. Kinney spoke in his customary low-key about his misadventures, splitting his time fighting off squadron after squadron of Japanese planes in his own plane, and on the ground overseeing the repair of the garrison's damaged aircraft. His gallant attempts helped the Marine and Navy defenders hold out

for an incredible two weeks. After the inevitable surrender, he was taken prisoner by the Japanese, but escaped from a train transferring POWs between internment camps in occupied China. As war returned in 1950, Gen. Kinney commanded a squadron in Korea, and became increasingly involved in aircraft design and performance. He later joined Hiller Aircraft Corp. as Manager of Flight Operations. His gripping book, "Wake Island Pilot," is currently available in the Hiller Flight Shop and bookstores.

TUSKEGEE AIRMAN RECALLS THE FATEFUL DAY

They endured the wrath of Nazi warplanes after defying all the obstacles in their own country to serve as African-American pilots. A courageous 450 of them turned in a history-making performance. The honored 99th Pursuit...



Captain Leon "Woodie" Spears was making it through World War II, flying one of the conflict's last missions over Berlin. He felt lucky, and not a little proud, considering what he'd been through to get into this seat in this P-51 fighter plane, and then survive 51 combat missions. That was when at 32,000 feet on March 24, 1945,

he was hit by ground fire. No doubt about it: a forced landing was next, and into enemy territory. Even that was going well until impact, when one of the plane's rudder pedals snapped down on his right foot, nearly severing it. Nazi soldiers took him prisoner, but the Russians liberated that town just days later. Captain Spears wasn't hospi-



talized for months to receive proper care for his severely damaged foot.

One of the few surviving original Tuskegee Airmen, Woodie Spears, 78, spoke recently at the Hiller Aviation Museum, accompanied by a P-51 like the one he flew in combat.

Raised in Pueblo, Colorado, where most black families worked for the

local steel mill, young Woodie Spears dreamed only of flying.

When the U.S. entered the war, painfully short on pilots, he learned of the Tuskegee Institute in Greenwood, Alabama, which was training black aviators for combat. There, Woodie and 996 others put up with a constant bombardment of racial epithets from white instructors, but they got through it all, cramming four years of training into two. Pilot Spears was one of only 450 who went into combat.

Woodie Spears flew again as a reservist in the Korean conflict before being discharged in 1966.

Of his remarkable life experience, Capt. Spears says he loves his times as a Tuskegee Airman. "Everything is started by a dream," he recalls. "The fact is, if you don't have a dream, you're not going to succeed at anything."

Photos at left: Tuskegee Airman Leon Spears tells a Hiller audience of his experiences, then sits in a familiar P-51 Mustang seat. His 99th Pursuit Squadron wreaked havoc on Nazi planes, knocking out 111 in the air and 150 more on the ground, along with a destroyer at sea and hundreds of vehicles. Of the 450 black combat heroes in the squadron, 66 didn't make it home to America. (Mustang exhibit courtesy of its owner, Jerry Gabe of Hollister, Calif.)

A FLIGHT SHOP FOR ALL AGES

From \$.20 to \$2,000; from cradle toys to adult collections, both genders find it at the Hiller Aviation Institute's irresistible Flight Shop.



When the Hiller Aviation Museum was designed several years ago, a Flight Shop space was provided that some observers considered rather oversized.

Fortunately, the talent for filling it with a surpassing array of merchandise came in the person of Duncan Chadwick. He had an ideal background garnered during 30 years in the specialty store business, including Hamley's of London, formerly the world's largest toy store.

The result has been one of the most complete and successful aviation shops in the nation, and a distinct asset to the museum.

Satisfying customer yens ranging from cradle toys to senior collectors, the Flight Shop has over 4,000 different items: men's and women's clothing, books and puzzles, model airplanes, jewelry, toys, construction kits and historical reference materials.

"People in surprising variety seek out this place," says Flight Shop Director Chadwick, "many of them women who today have a good knowledge and interest in aviation." Of course, Mr. Chadwick planned it that way: there's something here for everyone. Prices range from less than two bucks for a simple wind-up plane to \$2,000 for a delectable tri-



Far left: The Flight Shop was jammed with customers during Vertical Challenge Day last summer. Center: Director Duncan Chadwick with his treasures, and below, Inge Bitter helps a customer decide, while left, a potential customer salutes his idol.

and manufacturers for his merchandise.

He encourages his staff to take items out of their boxes and demonstrate toys and model flight characteristics in the museum's spacious Atrium. Lon Warneke, who doubles as front desk manager and Flight Shop salesman, is often seen flying balsa racers when he senses he has an audience.

Inge Bitter and Art Strosberg both say they love their work at the shop. "It's fun," says Inge, "just watching all those different ages fascinated by the same thing: flying."

From adults with the youngster very much alive in their souls, to kids yearning to be adult pilots, the Hiller Aviation Flight Shop is the place to research and dream, surrounded by the gentle sound of recorded old aircraft engines, in company with people who understand your yen.

motor Junkers Limited Edition by the premier German toy manufacturer, Marklin, *photo left*. (Sorry, it just sold).

Sales per museum visitor is always an important criterion for such shops, and this one averages more than \$6, among the highest figures for aviation museums in the U.S.

During the holiday season, the shop turns into a gift mecca where imaginations are stimulated and parking is easy. During that period, sales shoot up to as high as \$12 per museum visitor.

Director Chadwick, an expert and creative buyer, covers world outlets

SAVE THIS DATE!
VERTICAL CHALLENGE

SATURDAY, JUNE 22
 9 AM - 5PM

Helicopters, rides, airshow, exhibits, food & fun!

BRIEFINGS

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COMMUNITY AND CORPORATE EVENTS AT THE HILLER



Aviation events at the museum are only part of the story; then there's birthday parties, mitzvahs, fund raisers, company reunions...

Like many major museums with an impressive ambiance, the Hiller facility is made available to the public, civic organizations and companies to be used for their own events. Melissa Dingle, Special Events Director, says the entire museum facility is set up to accept community groups for meetings and parties.

The variety of events at the Hiller is, in both type and size, staggering. A dinner using both Gallery and Atrium for 500 guests is common, but so are smaller breakfasts, lunches and dinners in the Atrium; gatherings in the Theatre; and meetings with 15 to 50 in the Doyle Conference Center.

In May alone, Bar and Bat Mitzvahs will dine 300; Norm Mineta, U.S. Secretary of Transportation, will attend a 400-guest breakfast; there'll be a reception in the 747 cabin; a retirement party celebrated by 150 friends; three birthdays in the Theatre; a 300-guest vol-



unteer awards dinner...and on May 4, "Flight Watch" will give an all-day "defensive flying" course in the 747. That's a partial list for May.

The museum events staff teams up with customers and caterers to insure quality food and beverage service and distinctive decors, including well-organized "theme parties," with dramatic lighting, jazz bands, auction facilities...the options are limited only by imagination.

Interested? Call Melissa at 650-654-0200, ext. 205. She'll get you started.



Aviation progress has as often been fitful as deliberate. **1** The Avitor flew in 1869 after a broke Frederick Marriott financed it by creating nothing less than a bank and a major newspaper. **2** Naval aviation was conceived in 1911 when Eugene Ely landed on a ship in San Francisco Bay, but the first aircraft carriers weren't hatched until after World War I, and they were British. **3** In WWII, the allies never knew how close they came to losing until war's end, when they discovered Germans were producing supersonic swept wing jets. **4** They hastily ordered swept wings to replace straight ones on post-war B-47 bomber designs. **5** Decades after losing the supersonic race to money-losing Concordes, Boeing may profit by backing down to Mach .98 in its planned 250-seat Sonic Cruiser while Airbus banks on a huge but even slower A380.



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