



Runway 15



The Monthly Newsletter for EAA Chapter 1541, Lincoln, California

June 2017

Briefing Strip

- EAA Chapter 1541 participated in a big way with the **Lincoln AirFest** held on Saturday, June 10. The event was sponsored by the City of Lincoln and the Lincoln Regional Airport Foundation, but our chapter provide a large team of volunteers that provided over 320 hours of help to make the event happen.
- The **monthly membership meeting** on **Wednesday, June 21**, will be held at the chapter hangar with Bruce Estes presenting a program about using Foreflight and a tablet in the cockpit.
- The next **Saturday EAA Programs** are scheduled for **Saturday, June 24** and **Saturday, July 8**. See elsewhere in the newsletter for details. Come one, come all: invite your pilot friends.
- Chapter members will participate in another **fly-out** to a local airport on **Saturday, July 8**, after the scheduled Saturday EAA Program. Look for details on the chapter website. Don't have an airplane? Don't let that stop you: we will try and arrange a ride for you with someone who does.
- **Notice to Airmen:** The Truckee Airport (KTRK) has a working part-time control tower that opened June 1. Tower frequency is 120.575. Check the real NOTAMs for current information.
- Summer **Friday Flydays** are scheduled for the third Friday evenings of June, July, August, and September at the Auburn airport. Aircraft, cars, music, and barbecue are available 1700-2000. This is a charity fund raiser.

Calendar

- Saturday, June 17:** Lincoln Airport Aircraft Display Day, 0800-1000; LRAA Annual Meeting, 1030-1300, chapter hangar.
- Wednesday, June 21:** EAA Chapter 1541 Member Meeting at the chapter hangar; 1800 dinner, 1830 meeting.
- Wednesday, June 21:** Lincoln Airport Committee Meeting, 1000 am in the First Floor Meeting Room at Lincoln City Hall.
- Saturday, June 24:** Saturday EAA Program, Chapter Hangar, 0900-1100: NORCAL ATC controller information session
- Wednesday, July 5:** Chapter 1541 Board of Directors meeting at 1800, new pizza parlor near Tower Mart on Nicholas.
- Saturday, July 8:** Saturday EAA Program, chapter hangar, 0900-1100: Bay Area Tours; following the program, a fly-out event.
- Wednesday, July 19:** EAA Chapter 1541 Member Meeting at the chapter hangar; 1800 dinner, 1830 meeting.
- Saturday, July 22:** Saturday EAA Program, chapter hangar, 0900-1100

In addition to the events listed above, there are pancake breakfasts, fly-ins and other aviation activities scheduled for almost every weekend throughout the area. Check the chapter website calendar for the most current information: <http://eaa1541.org/events/>

For the most up-to-date information, go to the chapter website
<http://eaa1541.org/>

Newsletter Contributions

Please help make this newsletter better by contributing stories and photos that might be of interest to other chapter members. Perhaps where you flew, what you are building, or what you know about something. A few short paragraphs and a photo or two of your project or travels would be a great contribution. I'll take care of the rest. Please email me (Scott Thompson) at sthompson@aerovintage.com or call me at 916-716-3442.

Tidbit from the AIM

2-1-4. Runway Edge Light Systems

a. Runway edge lights are used to outline the edges of runways during periods of darkness or restricted visibility conditions. These light systems are classified according to the intensity or brightness they are capable of producing: they are the High Intensity Runway Lights (HIRL), Medium Intensity Runway Lights (MIRL), and the Low Intensity Runway Lights (LIRL). The HIRL and MIRL systems have variable intensity controls, whereas the LIRLs normally have one intensity setting.

b. The runway edge lights are white, except on instrument runways yellow replaces white on the last 2,000 feet or half the runway length, whichever is less, to form a caution zone for landings.

c. The lights marking the ends of the runway emit red light toward the runway to indicate the end of runway to a departing aircraft and emit green outward from the runway end to indicate the threshold to landing aircraft.

Chapter Information

Meetings:

Usually the third Wednesday of each month held at KLHM Hangar S-12. Details available at the website.

E-mail:

lincolneaa@hotmail.com

Website:

<http://eaa1541.org/>

Mailing address:

EAA Chapter 1541, PO Box 1126, Lincoln, CA 95648

Chapter Hangar:

Hangar S-12, Lincoln Airport

Chapter Officers

President:

Ron Wright (ronpw@hotmail.com)

Vice President:

Tony Kasabasich (tonykasabasich@yahoo.com)

Secretary/Treasurer:

Jim Hughes (jim.hughes1@att.net)

Chapter Board of Directors:

Bruce Estes

Tom Lieb

Bob Miller

Byron Maynard

Bruce Robinson

Dug Smith

Bill Wootton

Webmaster:

Dug Smith

Newsletter:

Scott Thompson (916-716-3442)
(sthompson@aerovintage.com)

Membership:

Open to all. Chapter dues: \$20 per year.

President's Corner



*by Ron Wright
Chapter President*

“What is Eagle Flights?”

EAA Eagle Flights is a fairly new program from the EAA headquarters that provides an exciting opportunity for our membership. We are underway reviewing the program and considering making it part of our chapter's future membership program.

Eagle Flights is a pilot mentoring program that is very different from Young Eagles. Eagle Flights is for adults eighteen years and older and is intended to be a one-on-one flight experience. The following is from the EAA web site describing what Eagle Flights is.

“The Eagle Flights program is about sharing a hands-on flight experience with an adult who has already expressed an interest in aviation. It is not a program for adults to simply get an airplane ride during a Young Eagles rally. Eagle Flights gives you the resources and organizational support to share the fun of flying with friends, family members, and co-workers - something many of our members already do. EAA chapters should view this program as an

opportunity to invite new participants into their local aviation community.”

In my recent conversations with fellow club members and a few CFI's, there is a significant number of adults that would like to learn to fly but don't know where to begin. They have not even had the opportunity to fly in a small aircraft or the fun of experiencing a flight to a nearby airport for lunch etc.

This EAA program is perfect to accommodate an individual's initial curiosity and not overwhelm the general membership with scheduling a special “all hands on deck” program like a Young Eagles day.

Here is more information from EAA's web site regarding Eagle Flights and what Eagle Flights participants receive:

“Eagle Flights participants will receive a free, six-month EAA membership after the completed Eagle Flights registration form is received by the Eagle Flights Office. We are currently working with several aviation companies to develop additional flight training resources and benefits that will help Eagles along their path to joining our community of aviators.”

There will be more information to share at upcoming meetings but in the meantime this is a good time to bring a friend to a meeting that has an interest in learning to fly and introduce the opportunity to participate in “Eagle Flight.”

Chapter member Tony Kasabasich recently became a partner on this pristine 1958 Cessna 182A. It is shown here with Tony and his son Garrett. (Bruce Estes)



The May Chapter Meeting...

The May chapter meeting was held on Wednesday, May 17, at the chapter hangar. The meeting started with a barbecue dinner featuring burgers grilled by our resident griller Dug Smith. A short business meeting followed, and then Richard Pearl provided an excellent presentation on his close encounter with pine trees that occurred last fall when Richard was trying to fly his motorized glider



from Lincoln to Minden, Nevada. Things did not work out as planned and Richard ended up in his aircraft vertically lodged in some trees between the east and west bound lanes of I-80 near Blue Canyon. Fortunately, he was not hurt in the incident, and he provided great insight into what happened that day and what can happen to pilots any day that things don't work out the way we expect them to.

And the Upcoming June Chapter Meeting...

The June membership meeting will be held on Wednesday, June 21, at the chapter hangar at the Lincoln Airport. A barbecue dinner is planned to start at 1800, with the meeting set to start at about 1845. The evening's presentation will be given by Bruce Estes on the ins and outs of using Foreflight on a tablet in the cockpit. Bruce has been using Foreflight for several years now and, like most pilots, has found it easier and more convenient than paper charts. The information available at your fingertips is eye

opening, and the situational awareness of having a moving map display can make flying in busy airspace much easier.



Lincoln AirFest June 10, 2017

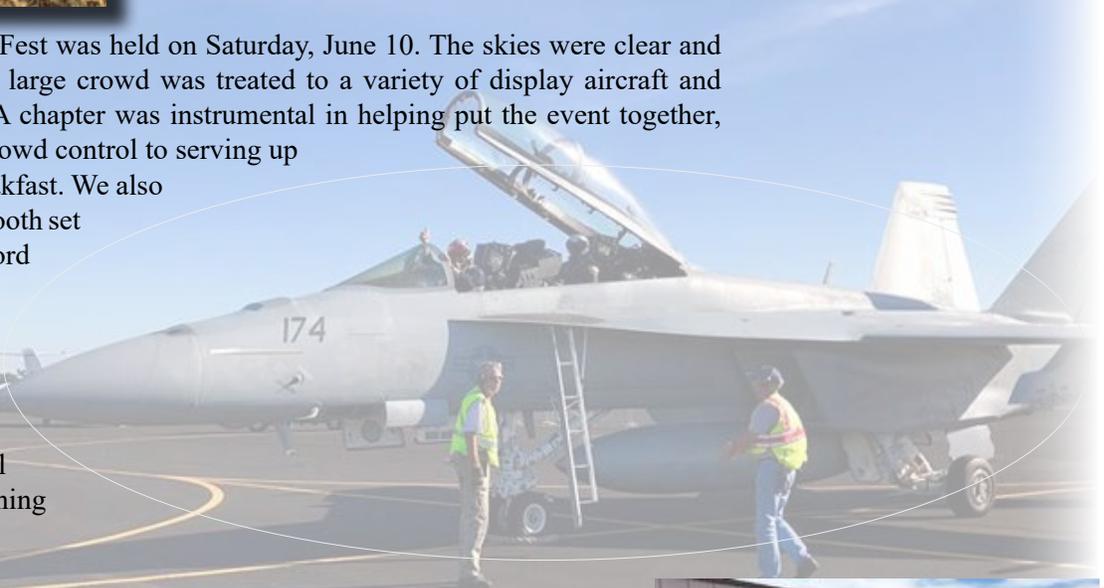


We served about 230 people at the pancake breakfast hosted by the chapter. Two of the helpful chapter volunteer were Michelle Sigur (at left) and Elena Yen



We had a full crew of chapter volunteers working on Thursday evening to get the airport ready, including Elyse Bingham (at left) and Cherish Bruce.

The Lincoln AirFest was held on Saturday, June 10. The skies were clear and the weather mild. The large crowd was treated to a variety of display aircraft and airshow acts. Our EAA chapter was instrumental in helping put the event together, from ramp layout to crowd control to serving up a popular pancake breakfast. We also had an informational booth set up to help spread the word about the chapter and just talk to visitors. The first chapter members were on the ramp before 0600 am and there were still EAA chapter guys cleaning up into the evening.



At right, a chapter painting party on the prior Saturday creates airfield markers to satisfy FAA requirements for the aerobatic box.



Above, our chapter booth was in the vendor area. We passed out information about the chapter and talked to many visitors. That's Bill Wootton's RV-6 elevator reject propped up on display.



At left, our own Tony K. served as the ground boss for the AirFest and could be seen often scooting through the crowds taking care of business. All reports say he did an outstanding job.

(All photos by Bruce Estes)

Member Spotlight

by Bruce Estes

This month, we feature member Ron Wright. Like a lot of us, Ron built model aircraft as a kid. But, his entry into flying was unconventional. When Ron was fourteen, he built a wing, strapped it to himself, and jumped off a roof. The neighbors were amused and Ron did not get hurt. When Ron was nineteen, he started flying again, for real. Ron flew hang gliders for a couple of years until he crashed and broke his arm.

As a senior class project for Ron's son, Ron and his son got their ultralight pilot licenses. Ron flew ultralights for five years. Several years later, Ron bought and built a Jabiru airplane kit. The workmanship on this airplane was so good that Jabiru displayed Ron's airplane in the Jabiru

booth at Oshkosh in 2006. Ron sold the Jabiru in 2014 and made a huge step up by buying a Columbia 400. The Columbia cruises in the mid teens at 170 knots. Ron says this airplane is a rocket ship.

Ron started his business, Catalina Imaging in 1985. Ron is our current EAA chapter president and stays VERY busy between EAA and Catalina Imaging. Ron is also a past vice president of the chapter and was a board member when the chapter was formed a few years ago. Ron's goals as president of Chapter 1541 are for our chapter to purchase a hangar so we have a home and to develop programs for youth education in aviation.



This photo of Ron was taken when Ron flew a round trip to Colorado to pick up a puppy. What a great use of his airplane. (via Ron Wright)

Fly Out Report

Castle Airport Giant Scale R.C. Fly In

Scott Thompson, Dave Magaw, and myself flew in my Cardinal to Castle Airport on May 27 to view the "Castle Airport Giant Scale Radio Control Model Fly In." This event is held every Memorial Day weekend and draws attendees from all over the West Coast. Typically, the event will have 125 registered pilots and about 250 models. The rules are simple: The models must have a wingspan of at least 80" or be 1/4 scale. The 1/4 scale rule allows jets to fly

in this event. The event is not a contest, just a great time for modelers to showcase their best, most impressive models at this event. The type of models included turbine jets, 35% scale aerobatic airplanes, racers flying at more than 200 mph and lots of World War II airplanes with wing spans from 80" to 16'.

The weather was pleasant, the flight was great, and the company was superb.

--report and photos from Bruce Estes



Is that a real B-24 Liberator on the Castle flight line? Sure looks like one but, nope, it is a large scale RC model. The detail that goes into these flying models reveals the hundreds of hours it must take to build one.

Dave Magaw provides some scale to show the size of this B-29 Superfortress model. The wingspan comes in at sixteen feet and it weighs a reported sixty-eight pounds. Not sure if that is empty weight or weight loaded with fuel and bombs. It does carry bombs, doesn't it?



A Brief History of the Tilt Rotor Aircraft

*by Martin Maisel
(photos as credited)*

Part 3 - Proof of Concept

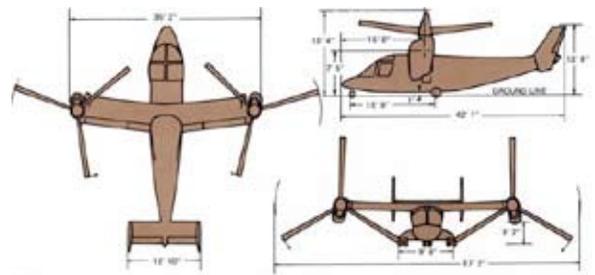
The XV-15

In spite of the failure of the XV-3 to demonstrate the merits of the tilt rotor aircraft, supporters of the concept in the government and industry were convinced that its technical issues would eventually be resolved and it would meet predicted performance targets. To achieve those objectives, the rotorcraft industry (primarily the Boeing Helicopter Company and the Bell Helicopter Company) and government agencies (NASA, the Army and the Air Force) initiated focused research efforts involving design studies, analyses, wind tunnel tests and simulations to improve hover and cruise performance, handling qualities, and flight dynamics and to ensure satisfactory rotor/pylon/wing aeroelastic stability throughout the flight envelope.



Preparations for XV-15 Proprotor Static Test at the NASA Ames Outdoor Aerodynamic Research Facility, 1984 (Marty Maisel)

By 1972, high confidence in the new technology garnered the support of top-level Army and NASA management and a joint program was established to develop a new “proof-of-concept” research aircraft. The Army/NASA Tilt Rotor Research Aircraft Project Office was established at the NASA Ames Research Center, Moffett Field, California and the Bell Helicopter Company was selected to build two proof-of-concept XV-15 aircraft. Sadly, Bob Lichten, the leading industry advocate of the tilt rotor died in a motorcycle accident in 1971 and did not live to see the development of the XV-15.



Three-View of the Bell XV-15 Tilt Rotor Research Aircraft (Bell Helicopter Company)

The XV-15 was powered by a de-rated version of the Lycoming T-53 turboshaft engine modified to allow vertical operation. A significant element of the XV-15 project was the fabrication and bench tests of the new transmission gearboxes and cross-shaft system. Furthermore, the aircraft and its components were subjected to extensive ground tests and a wind tunnel test prior to the initiation of the flight program in 1979.



XV-15 in the NASA Ames 40-by-80 ft Wind Tunnel. (NASA AC78-0579-1)

By 1981 the flight tests had validated the predicted performance, handling and flying qualities, and aeroelastic stability for all flight conditions. Before long the XV-15 set five new FAI rotorcraft records, including a rotorcraft level flight speed record of 301 knots.



XV-15 Tilt Rotor Research Aircraft Hover Mode (NASA EC80-13848A)



XV-15 Tilt Rotor Research Aircraft Conversion Mode (NASA)



The Bell XV-15 Tilt Rotor Research Aircraft Cruise Flight Mode (NASA)

When NASA and Army project funding shortfalls threatened the continuation of the flight program, the Navy contributed funds in exchange for an evaluation of tilt rotor operations aboard an aircraft carrier. Government funding limitations also prevented the operation of two aircraft at Ames so one of the XV-15 aircraft (tail number N702) was bailed to Bell to allow them to conduct military and civil operations evaluations and guest pilot flights at Bell's expense while the NASA/Army team at Ames (using XV-15 N703) conducted research-related flights. The Bell aircraft was also exhibited at the Paris Air Show in 1981 where Senator Barry Goldwater, then the Chairman of the Senate Armed Services Committee, requested a flight in the XV-15. A few months later he became the first non-test pilot to fly the Tilt Rotor Research Aircraft.



XV-15 (N702) performing shipboard operations evaluations on the USS Tripoli, August 1982. (NASA AC82-0612)-

In 1991 a maintenance error caused a rotor-control component failure on N702 while the aircraft was in a low hover at Bell. The aircraft rolled over and was destroyed but the two-man crew escaped serious injury. Since NASA and the Army had recently decided to discontinue flight tests of the other XV-15 (N703) at Ames, it was transferred to Bell to allow them to continue their application evaluations and guest-pilot demonstrations.

By 2002 Bell was involved in other tilt rotor aircraft development programs so XV-15 N703 was flown to the Udvar-Hazy National Air and Space Museum at Dulles, VA, where it was placed on permanent display. The XV-15 was one of the few aircraft delivered to the Udvar-Hazy NASM in flightworthy condition.



XV-15 (N703) at the Udvar-Hazy National Air and Space Museum (Marty Maisel)

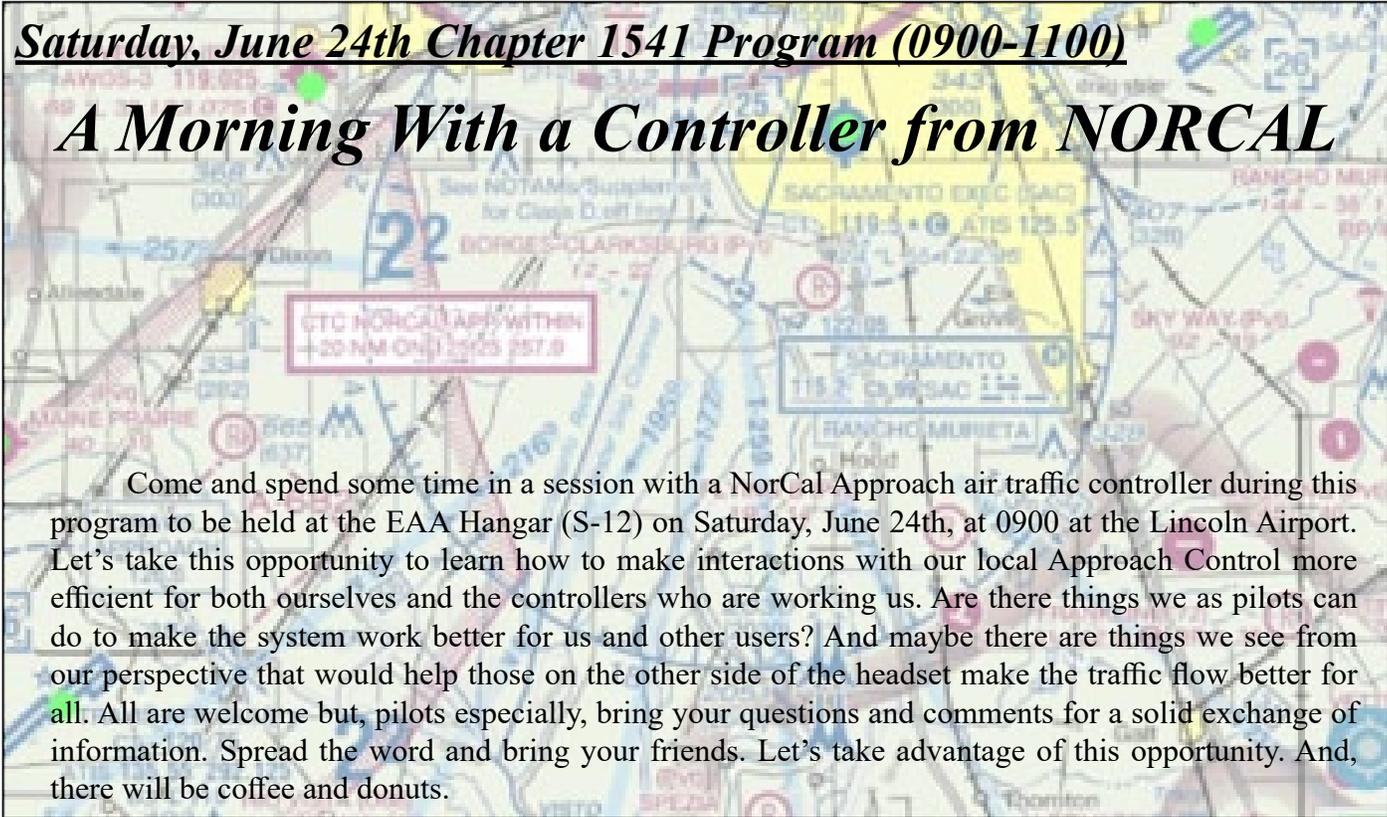
By the time the XV-15 was retired, it had accomplished all of its proof-of-concept goals, performed numerous military and civil application evaluations (which involved hundreds of conversions from helicopter-mode to cruise-flight and back to helicopter-mode), experienced two in-flight engine failures followed by safe landings (demonstrating the effectiveness of the cross-shaft system) and served to introduce over 400 military, civilian, industry and foreign guest pilots to the "new" VTOL technology. As an indication of its contribution to aeronautical technology, in 2003 the National Geographic Society included the XV-15 on its list of the 100 most significant aircraft of the first 100 years of powered flight.

Tilt rotor technology was now in hand – but will it be applied?

Further information about the development and flight tests of the XV-15 is provided in NASA Monograph SP-2000-4517, [The History of the XV-15 Tilt Rotor Research Aircraft: From Concept to Flight](https://history.nasa.gov/monograph17.pdf). That monograph can be viewed at: <https://history.nasa.gov/monograph17.pdf>

Saturday, June 24th Chapter 1541 Program (0900-1100)

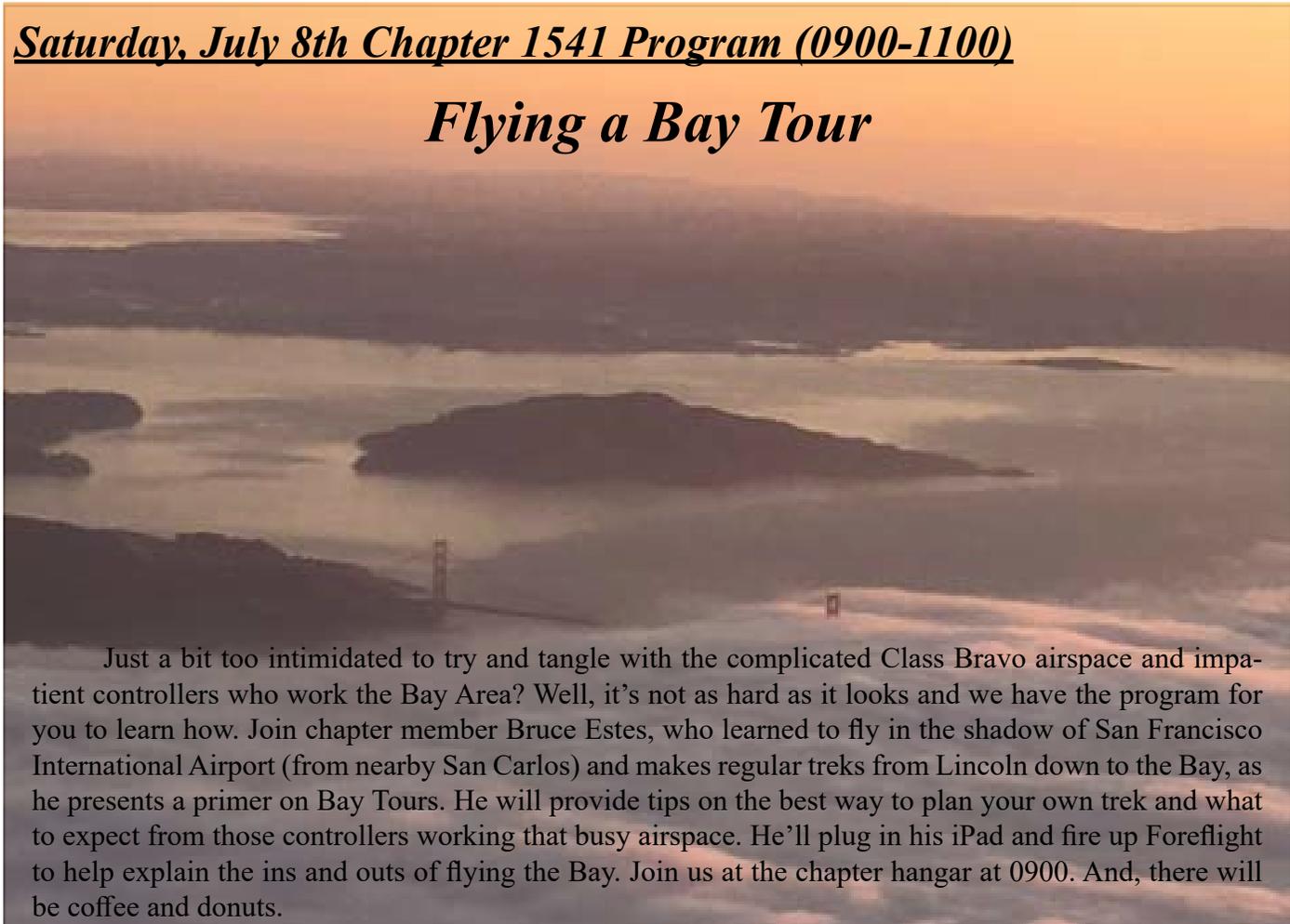
A Morning With a Controller from NORCAL



Come and spend some time in a session with a NorCal Approach air traffic controller during this program to be held at the EAA Hangar (S-12) on Saturday, June 24th, at 0900 at the Lincoln Airport. Let's take this opportunity to learn how to make interactions with our local Approach Control more efficient for both ourselves and the controllers who are working us. Are there things we as pilots can do to make the system work better for us and other users? And maybe there are things we see from our perspective that would help those on the other side of the headset make the traffic flow better for all. All are welcome but, pilots especially, bring your questions and comments for a solid exchange of information. Spread the word and bring your friends. Let's take advantage of this opportunity. And, there will be coffee and donuts.

Saturday, July 8th Chapter 1541 Program (0900-1100)

Flying a Bay Tour



Just a bit too intimidated to try and tangle with the complicated Class Bravo airspace and impatient controllers who work the Bay Area? Well, it's not as hard as it looks and we have the program for you to learn how. Join chapter member Bruce Estes, who learned to fly in the shadow of San Francisco International Airport (from nearby San Carlos) and makes regular treks from Lincoln down to the Bay, as he presents a primer on Bay Tours. He will provide tips on the best way to plan your own trek and what to expect from those controllers working that busy airspace. He'll plug in his iPad and fire up Foreflight to help explain the ins and outs of flying the Bay. Join us at the chapter hangar at 0900. And, there will be coffee and donuts.