EAA MILE HIGH CHAPTER

PRESIDENT KIRBY WHITE 423-5134

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NEWSLETTER KIRBY WHITE 423-5134



Volume 12, ISSUE 6, JUNE, 1989

THIS MONTH: This month's meeting will be held on Saturday, June 10, 1989 at 7:30 P.M. in the Club Room of the Denver Air Center, which is at the junction of the two main roads leading into Jefferson County Airport. The program will be a selection of videotapes, from which the members can decide which one they would prefer to watch.

LAST MONTH: With 60 members and guests in attendance, the meeting of May 13, 1989 was called to order at 7:45 P.M. by President Kirby White in the Club Room of the Denver Air Center. The minutes of the April meeting were approved as published in the Newsletter.

<u>Guests</u>: Guests present were Doug Yelton of Northglenn, Bruce Stevens of Golden, Bernie Brant of Lake crion, Michigan, and Lynn Lawton of Concord, California -- who was a guest of Leonard Lawton.

Treasurer's Report: There was none given.

old Business: The subject of selling Chapter 43's BD-4 fuselage kit and complete set of plans (which was detailed in the May, 1989 Chapter 43 Newsletter) was brought up. Ken Lysek verified that he was offering Chapter 43 \$100.00 for the project, and after some discussion -- most of it humorous -- the membership voted to sell it to Ken. The best part was when Ken mentioned that he had not yet informed his wife of his intentions. He said it was okay, because he didn't say anything to her before he brought his other project home, either! Kirby thanked both Ken Williams and Fred Seal for storing the project over the past couple of years. Sheeon and Daphne Davenport brought up the Air Rallye that they had been working on putting together for the financial benefit of the Rocky Mountain Regional Fly-In. They said everything was coming together well, and everyone who participated should have a really good time. The event was not limited to those who could fly the course. Those who didn't have airplanes were more than welcome to join in on the fun. Brad Davenport talked about what he knew on the Mode C transponder issue, concerning all aircraft in general and non-electrical equipped aircraft (including certificated and homebuilt airplanes) in particular. He read an FAA letter (which is published in this Newsletter) that dealt with this subject, and gave his opinion on what it all meant and how he thought it would affect all of us. Brad answered a number of questions, and other related comments were made by some of the members at the meeting. What it all comes down to is that there are still a lot of questions. to be answered about the Mode C subject.

New Business: Cathy Sheeon and Daphne Davenport brought up the 1989 Chapter 43 Christmas Banquet. They said it was not too early to start making plans and get our reservations in early. They said they would contact a few places during the next month and report their findings at the June meeting so the membership could make a decision. Jim Thompson said we should also start thinking about Ushkosh rides and riders. Since he brought it up, he was pretty much nominated to do the coordinating. More on the subject of Oshkosh will be discussed at the June Chapter 43 meeting. Kirby had quite a few FAA Notam booklets that had been sent to him by the FAA unrequested. They detailed the VFR and IFR procedures that will be in effect for the Oshkosh Fly-In. They were very complete, and Kirby invited anyone thinking about flying to Oshkosh to take one. Leonard Lawton talked about a PCW/MIA Benefit Airshow which was scheduled for Saturday, May 20, 1989 at Front Range Airport. He said it was mostly going to be a military show. Brad Daven-port said he had gone to the Fly-In Breakfast at Downtown Fort Collins Airpark earlier in the day, and had a good time. Kirby asked the memoers present to consider whether to select and designate the Rocky Mountain Regional Sport Aviation Committee to be our State organization for EAA sport aviation activities. In addition to organizing the Regional Fly-In every year, the Committee would help out Chapters in trouble and coordinate activities between Chapters and also represent the EAA in the state. This was unanimously approved by all members present.

dene's Corner: Gene Horsman reported that the following records have been approved as world records held by Norm Howell, who used to be a Chapter 43 member: Class C-l A/O, Piston Engine Aircraft Weighirs July 27, 1988 in a Quickie. Speed Over A 15/25 km Course, 145.22 he and his new Luscombe partner were having with the State of Coloseveral months, and he warned everyone to be very careful when dealsems to be especially true in the case of partnerships.

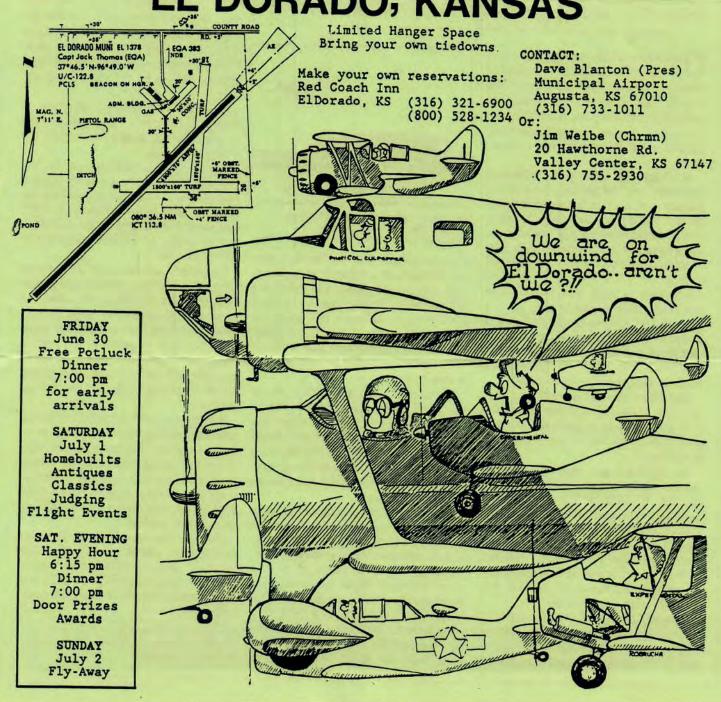
Progress Reports: Leonard Lawton said that he had recently received his plans for a KR-2. He is looking forward to getting started on it, as soon as he decides exactly where he wants to build it and then clears out the necessary space. Ken Lysek announced (rather humorously) that he had recently purchased a BD-4 project. Everyone laughed and applauded him for his accomplishment.

8:40 P.M. After the break, everyone watched a videotape on checking out in a P-51 Lustang. The tape was recently made by Jeff Ethel. He went through the pre-flight inspection, a complete cockpit was extremely well done. The other videotape that was shown was specifically, the tape recounted the history of "Operation Stranby knocking out bridges and railroads and highways etc. Many times the P-47s would fly with no specific destination and see what a success.

AVIATION HAPPENINGS: June 9-11, 1989 Albuquerque Airshow, Call Kirby for complete details.

June 24-25, 1989 The Great Colorado Races, Formula One Pylon Air Racing, Vintage Auto Racing, Aerobatics, Front Range Airport, Call Jon Gallo for information 363-0894

25TH ANNUAL FLYIN EAA JAYHAWK CHAPTER 88 SATURDAY JULY 1, 1989 CAPTAIN JACK THOMAS AIRPORT EL DORADO, KANSAS



MAYOR'S FOLLY TOOK FLIGHT

Ben Stapleton had trouble getting Denver's first airport off the ground, too

Opponents of the new airport say it shouldn't be built for a number of reasons: It isn't the best site. The mayor, his friends and business associates stand to gain. Air-traffic projections won't justify construction expenses. And, it is too far from downtown.

No, we're not talking about Denver International, the proposed \$3 billion project set to replace Stapleton International. These concerns, which easily could be taken from today's headlines, were raised in 1929, when Mayor Ben Stapleton pushed for a new municipal airport.

The year is 1928, and Stapleton is steadfast in his refusal to drop his pet project. He ignores critics and plows ahead with plans for what formally was known as Denver Municipal Airport and, informally, as Stapleton's Folly or Simpleton's Sand Dunes.

Back then, the 640 acres of cow pasture east of Denver was purchased for \$143,031. In spite of protests, the airport sprang up out of sagebrush and skepticism.

Yet, by the time a four-day celebration marked the opening of the airport on Oct. 17, 1929, public opinion had reversed. Thousands of enthusiastic Denverites flocked to the countryside east of Denver to witness aerial races and take part in the opening "Festival of the Skies." Everyone was there, except Mayor Stapleton, who was in the hospital with pneumonia.

Crowds toured the new airport's two-story terminal, hangar, fire station and four short gravel runways. But the star of the state-of-the-art equipment



Thousands attended Denver Municipal Airport's Oct. 17, 1929 opening.

demonstrations was the landing system. It featured a 6-foot-high beam of light that swept across the field in a 180-degree arc. A pilot making his final descent knew he was 6 feet from the ground when the light hit his eyes. This warning gave him just enough time to prepare for the bumpy landing on the runway.

The celebration over, backers of the new airport held their breath to see if it would prove a drain on city revenues. But after a shaky start, scheduled flights rose from eight to 30 flights a day in 1930. By 1931, three flying services and three transport companies used its runways.

Stapleton's pet project quickly proved to be both a financial success and a boon to making Denver an important stopover for east/west flights.

During the early years of the air travel industry, flight patterns were considerably more informal than to-day's. One story tells of a pilot who knew how far he'd gone by the number of cigars he had smoked. Other pilots followed roads from town to

town, or depended upon large signs and arrows painted on the tops of buildings for guidance. Later, homing devices emitted signals to let pilots know they were on the right track.

In the 1930s and '40s planes couldn't go high enough to pass over the Continental Divide west of Denver, so they stopped off at the Denver airport either before or after taking the main route through Cheyenne, where the mountains were lower.

By 1938, the booming airline business required construction of the airport's first control tower and paving of the east/west runway. That same year, both Continental and United airlines opened offices in the expanding airport.

In 1944, city officials decided to change the airport's name to honor the mayor and his tenacity in seeing the project through.

Today, with a new airport on the drawing board, the questions appear hauntingly similar. Stapleton was the nation's fifth largest airport in 1988, and some believe expansion is critical. Yet air traffic in Denver declined in 1987 and 1988.

Stapleton officials say the airport serviced about 34 million passengers in 1987, or around 1,500 flights a day. But those figures were down slightly from 1986, and final figures for 1988 show a further decline of about 2.7 million passengers. Only air freight showed anincrease (12 percent) in 1988. Some blame rerouting by the airlines for the decline.

Barring the new airport's rejection, groundbreaking for the facility to be built east of Denver on 45 square miles of land annexed from Adams County is planned for this summer. Opening is scheduled for spring 1993, when the \$1.7 billion first phase of construction should be finished.

Despite the outcome of Denver's new airport, one thing is certain: Taking bold steps to help Denver anticipate the future paid off in 1929 and helped make the city a major transportation hub.

Molly Sweeney is DENVER MAGAZINE's history columnist.

FINESSE FINISHING AND PAINT CARE

by Ben Millspaugh

The process known as "finessing" is relatively new to paint refinishers. It became popular with the new generation of "color-coat/clear-coat" polyurethane paints. Within the decade of the Eighties, polyurethanes have become popular with both automotive and aircraft refinishers. These paint finishes have a durability that is superior to the traditional acrylic lacquers and alkyd enamels.

Lacquers generally have to be compounded and buffed-out after curing; enamels, on the other hand, dry with a gloss that doesn't need to be buffed. One of the great problems with the application of enamels is dust contamination. With lacquers, you can apply a couple of coats, let flash, then using a fine grade of sandpaper, gently remove the dust; with enamels, the dust generally becomes a part of the finish.

Enter the acrylic enamel. Late in the 70's, acrylic enamel was introduced and this was even more durable than standard enamels. A catalyst was added that made the finish cure all the way through in a matter of minutes. The acrylic enamels evolved into a hi-tech paint line known as the urethane enamels. These used a polyurethane plastic as the basic component of the paint and required a catalyst to harden.

All paint finishes are compromises and each type has something to offer that others don't. Lacquers, for instance, tend to be more brittle and they don't generally hold up well under the harsh conditions we have here in Colorado. Enamels are more durable, but paint preparation is far more involved. Enamels generally have a hard glossy look while lacquers have an attractive, warm glow. The old custom show cars of the Fifties were lacquer beauties; we've all heard about 30 coats of hand-rubbed lacquer. It was not uncommon to take a long as two months to make a lacquer finish perfect. The reason for the extended time period was the curing and shrinkage. Lacquers and lacquer-based primer/surfacers flashed quickly, but it took weeks to stop shrinking.

Enamels generally take road or flight use better than lacquer finishes, especially at high altitude where the ultraviolet light is so intense. The acrylic enamels wear much better and that is why so many manufacturers now use this finish on the assembly line.

The current generation of polyurethanes paints have desirable characteristics of both lacquers and enamels. You can get the durability and wear characteristics of an enamel, yet you can polish out the surface of a urethane and make it glow like lacquer. That is where the finessing comes into the picture.

Just for a quicky review, sandpaper comes in various grits; commonly referred to as coarse, medium, and fine. In the refinish business, they carry it even further by giving the customer abrasive numbers. For example, a grinding disk used to take a surface down to the bare metal may have a number of #24.

This is very coarse. The numbers go up from there like #36, #40, #80,#100, #180, #220, #240, #320, #400, #600, etc. The higher the number, the finer the grit. Automobiles and aircraft are usually prepared with numbers between #80 and #400. Some papers are made waterproof so the surface can be irrigated during sanding. This keeps the sanded paint moving away from paper so it won't clog.

At first, all painters had available was #600 wet/dry sandpaper to nib (sand lightly) out lacquers. These papers were originally used on the first generation polyurethane enamels. Then someone came out with #800 which was even finer. This was generally known as ultrafine. All of a sudden, things changed dramatically with the introduction of #1000, #1500, #2000, and #3000 paper by a Japanese company known as Nikken. Sanding with this fine paper was great, except the experts found that using a traditional buffer and wool pad was putting swirl marks in the surface that were more difficult to remove than the sanding scratches.

The Meguiar Company of Newport Beach, California, came out with a process that is generally accepted as leading edge in final detailing a urethane paint job. Bear in mind that finessing works well on acrylic enamels; however, the majority of refinishers are leaning toward the polyurethanes and that is where this new process "really shines." The finesse process works something like this:

1. In about 12 hours after painting a car or plane with a polyurethane enamel, the detailer (or painter) will remove pin-holes, dust, hair, and other contaminants with a very fine sandpaper. Often they will start with #800 to #1000 paper to remove the real "lumps." Then, the surface is nibbed down with #1200 to #1500 paper. This is used wet. Most of the detailers will put a little detergent in the water bucket to lubricate the sandpaper. A sponge filled with water is used to irrigate the surface while sanding.

2. To remove the scratches left by the #800-#1500 paper, the detailer will start with #2000 and sand the surface to a dull finish. A continuous progress check is usually made with a squeegee or a windshield wiper. This whole process is called color sanding. The best finish is generally obtained using a flexible rubber block to hold the sandpaper; however, one must be careful on ridges-the paper does cut and it will go down to the primer or ultraviolet coat rather quickly.

3. The finish is allowed to dry off. Using a low speed buffer, like the German Flex, or the Japanese Makita, and a Meguiar foam pad specifically designed for the finesse finish, the surface is buffed to a gloss using the #2 Mirror Glaze. (Mirror Glaze, by the way, is a Meguiar trademark for a complete line of glazes, cleaners, waxes and polishes). When applied at low rpm, the swirl marks are minimized. If swirl marks do show up, Mequiar's #9 Swirl Mark Remover, is applied using the same low rpm buffing technique.

4. Finally, Meguiar's #7 is applied to the surface. This glaze puts paint "nutrients" back into the finish

5. To maintain this finish, I use Meguiar's #26 yellow carnuba wax or a product called Harly's Wax. Both are available in a liquid or as a paste wax in a can.

FINISH CARE OVER LONG TIME PERIODS

I have been asked time and again what I use on the show car (a Canadian -built Spectra convertible based on a Datsun 280ZX running gear) and there are no secrets. I've participated in car shows since I was in high school and one of the best ways to learn what works is to copy what everyone else is using. The following is the process I use to keep the show car in el primo condition:

1. I keep it out of the sun as much as possible. When parked in the sun for long periods of time, I cover it with a heavy flannel car cover. The sun is, according to Meguiar's experts, the greatest killer of paint finishes.

2. I wash the car using Eagle 1 Car Wash and Conditioner. This conditioner is applied directly to a 100% cotton terrycloth hand towel. I use 4 to 5 capfuls of

this conditioner on the wet cloth.

3. The car is sprayed with cold water; Eagle 1 is then applied and I think you'll like the nice finish it gives the car even when wet. As I understand, this is a new poly-compound that is water soluble and leaves a wax film on the car when dry. This works especially well on black finishes.

4. Rinse the car or plane repeatedly to keep anything from drying.

5. Using as many as 6 soft cotton towels, I dry the surface.

6. Meguiar's #7 polish is applied .I usually buff it before it completely dries to a white film. I've found that this minimizes the chalk build-up. Again, I use 100% terry cloth towels, or cotton diapers (the old style), to buff the surface.

7. If car is to be driven, or left out for an extended period of time, I'll give it a coat of pure 100% yellow carnuba wax. This seems to retard surface oxidation; however, it will tend to break down in a couple of weeks. Again, use the soft towels or diapers to buff the surface. One of the nicest things about the Eagle 1 Car Wash--it doesn't strip wax from a surface. It can be washed repeatedly and the carnuba won't come off. Normal detergents will take wax off the car.

8. For tires, vinyl, and some synthetic rubber, I use Eagle 1 Protectant. It is

not as oily as Armor All and gives a more natural appearance.

9. For leather, I use a product called the Tannery (a cream). It gives the leather a very nice finish and it smells good.

10. To give the interior of your car or plane a nice smell, put lemon Pledge on a rag and place it under the seat. Leave it for a week or two.

11. For plastic windshields, I would recommend Meguiar's #10. It was originally formulated for the U.S. Air Force and it is available for general public use.

I don't work for Meguiars...it just happens to be a product line that many show car fanatics use. I think you will find this product used on many of the fine finishes at Oshkosh too.

Most automotive paint stores, like Al West, Heckendorf, or Allen carry a complete line of Meguiars. A&A Tradin' Post on south Broadway also carries the Meguiar's line. Some of the paint stores carry the Eagle 1 Protectant. If they don't call Gary Bracken at Auto Sport on West Colfax. The Eagle 1 Car Wash & Conditioner is carried by Checkers, Osco, and just about any of the major stores. If you can't find this stuff, give me a call at 795-3656 and I'll tell you where I buy it.

From: ANMZUU

To: ANM250, ANM.FSDOS

Subj: TRANSPONDER W/ AUTOMATIC ALTITUDE REPORTING

Forwarded message:

Posted: Fri Mar 31, 1989 8:56 AM EST Msg: KJIJ-1519-7794

Harris

From: AFS300 To: alldiv

Subj: Transponder with Automatic Altitude Reporting

ACTION: Transponder with Automatic Altitude March 17, 1989
Reporting Capability Requirements of Part 91,

Section 91.24, of the Federal Aviation

Regulations (FAR)

Manager, Aircraft Maintenance Division, AFS-300

All Regional Flight Standards Division Managers

In June 1988, Amendment No. 91-203 of Part 91, Section 91.24, of the FAR was published in the Federal Register. The rule, as amended, states that all aircraft operating in the airspace detailed in Section 91.24 are required to have a transponder with Mode C capability for automatic altitude reporting. Aircraft not certificated with an engine-driven electrical system or not subsequently certificated with such a system installed (balloons and gliders) are excluded from this requirement when conducting operations as further defined in the rule.

A number of inquiries have been received regarding whether or not amateur home-built aircraft are exempt from the transponder with Mode C requirement. The amended rule does not specify the certification basis of the aircraft. Therefore, all amateur home-built aircraft with an engine-driven electrical system installed and a valid airworthiness certificate are subject to the transponder with Mode C requirements when conducting flight operation as defined in Section 91.24.

Please ensure all Flight Standards personnel receive this information.

/s/ Raymond E. Ramakis



ROCKY MOUNTAIN REGIONAL

FLY-IN & AIR SHOW

JULY 15, 1989

RAIN DATE-SUNDAY 16th

SATURDAY • 7:30 A.M. TIL 5:00 P.M.

\$5.00 PER PERSON / \$10.00 PER VEHICLE

EAA. 99's. ANTIQUE MEMBERS \$4.00 EACH (with card)

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For More Information Contact

Bob VanDalsem (303) 667-6734 — LOVELAN Bill Marcy (303) 798-6086 — DENVER EAA Chapters 43, 72, 301, 515, 648, 649, 660, 720, 808.

Colorado 99's
Antique Airplane Assoc. of Colo.

ROCKY MOUNTAIN REGIONAL FLY-IN & AIR SHOW

AIRPORT CLOSED

2:00 - 4:30 SATURDAY

Departures OK With Permission

- Free Transportation To &
 From Motels
 Coach House Inn (303) 667-7810
 Quality Inn (303) 493-9000
 Super 8 Motel (303) 663-7000
- Pot Luck Friday Night
- Bring Your Own Tiedowns
- Free Camp Area

- Some Hangar Space Available
- Breakfast & Lunch All Day Saturday
- Free Breakfast to Pilots Flying In
- Awards & Banquet Saturday Night
- Special Shoulder Patch for Volunteers
- Breakfast & Fly-Out Sunday A.M.
- Cheyenne Sectional FBO (303) 667-6645
- NO TOWER NO TRANSPONDER NO ENCODER
- · Caution: Jump Zone on east edge of the airport



Chapter 43 Newaletter c/o Kirby White 8780 West 90th Place Westminster, CO 80020





EUGENE HORSMAN 210 LOOKOUT VIEW CT. GOLDEN, CO 8