Chapter Contacts

Please forward to your members!

SPRUE EXAMINER

All that's necessary to open Ben Morton's latest Austin newsletter is clicking on this link:

http://austinsms.org/news/2016/August2016.pdf

As always, this newsletter (and more great back issues than you'll EVER have time to read) is available via the Austin chapter website at:

www.austinsms.org

Rick Cotton starts off the festivities with some amusing comments on fighting off the summer (it's hot!) doldrums.

You'll find some useful modeling information from our RAILROAD modeling friends who suggest tools and materials found in the lady's or cosmetic aisle of the drug store. Check it out in the link provided by Jean-Michel D'Aubigne's regular "Web at Night" feature. Also featured is a link to a neat video on the gunners working to feed their accurate machines in the back end of a Herk gunship.

Dennis Price has provided a nice photo essay report on the Texas Air Museum, a small museum dedicated to early General Aviation, with rare and unusual artifacts like a Pietenpol Air Camper, an early "home built" of a long-ago Air Age.

Be sure to read how Mike Lamm built his model for the Procrastinator's Contest, and see if maybe your model building isn't similar..... or maybe you could do that tomorrow. The procrastinator theme continues with Roy Lothbrok's explanation of the chapter's quarterly contest program (which probably because it was a procrastinator project, members seem to have been allowed a "four month quarter" to complete there models. Lots and lots of neat work

presented here .....even Bill Delk's Monogram Phantom Mustang completed after seven years!

And now for what you probably already turned to first: Austin's famous *"Old Rumors/New Kits 2G"* about what's coming and what's rumored. Lots and lots of stuff coming, starting with many new historical figures, like "Little John" from the Robin Hood franchise. For the armor guys the reviewer was excited about a "Braille Scale" (1/72nd) T-62 tank with full interior! Some impressive stuff!

For the ship guys there are some new Japanese carrier kits, and break-the-piggy bank detailing parts for the take-a-2nd-mortgage-out 1/200th HMS Hood (do you remember when this hobby was relatively inexpensive?) while the Star Trek crowd will be excited about Revell/

Germany announcements. A Millennium Falcon will be available at a rate of about a dollar a part ....and there are four hundred parts!

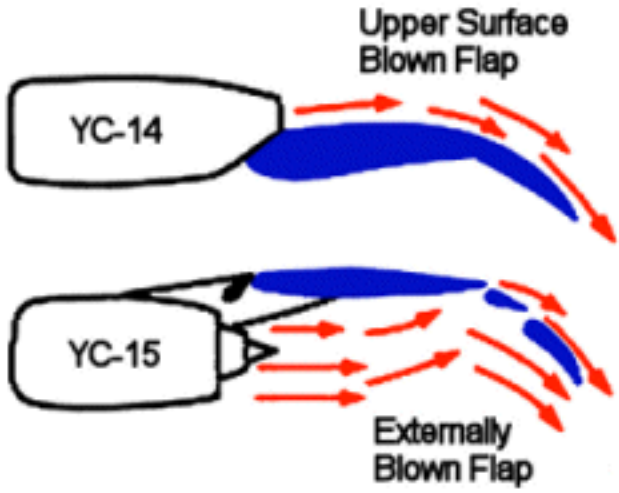
For those of you who always wanted a Porsche, you now have your chance for a 1966 model for only $200! Of course, it's just the engine, and 1/4 actual size, and made of plastic, but all the parts inside allegedly move.

Then we get to the airplane stuff. Most of this month's announcements wasn't too exciting for me .....stencil decals for a 1/144th F-4 sound to me like an exercise in masochism! But TWO listings from Anigrand REALLY caught my eye, from among a clutch of 1/144th scale resin kits. They were the Boeing YC-14 and the McDonnell-Douglas YC-15.

As many readers will recall, in the early 1970's the USAF funded an "Advanced Medium STOL Transport" (AMST) technology demonstrator program, which if it hadn't been for that same nasty old budget problems would have eventually resulted in a C-130 replacement. Four "test articles" were built, two Boeing YC-14's and two McDonald-Douglas YC-15's.

The Air Force never did buy a C-130 replacement medium transport, so Lockheed still continues to churn out the 'ol Herk. (The first one flew sixty-two years ago!) As far as Lockheed is concerned, the best C-130 replacement is still another C-130!

The two Boeing and McDonnell Douglas designs had widely different approaches to the problem of good short field performance; i.e.; STOL. They're illustrated in this simple sketch.



Boeing used two huge turbofan engines cantilevered in front of the wing, placed so that the jet flow would follow the curvature of the wing and flap (the slot between them sealed), which curved the jet flow downward (called "Upper Surface Blowing") to create powered lift. The fluid mechanics phenomenon is that of a fluid or gas following a curved surface, almost as if it's in a pipe ....even if its simply water flow being diverted as it curves around a spoon held under a faucet.

It's called the Coanda effect, named for the Romanian aerodynamist Henri Coanda who first identified the principle over a hundred years ago.

McDonnell-Douglas used a more conventional approach, with four engines externally blowing the gaps between flap elements and the wing.

The AMST program never got past the four development airplanes, but McDonnell-Douglas used much of their externally blown flap technology in their proposal for a later, separate procurement of the larger aircraft as a C-141 replacement. That airplane became the C-17.

IPMS 6390

B.S. Alert …proceed at your own risk!

P.S. Were you curious about why I was so interested in two airplanes that were never produced, and I have never even *SEEN?*

Well, in 1972 I was in a maintenance officer slot in C-130's at Small Pebble (Little Rock AFB) when Mother Air Force called to tell me that my previous C-130 and C-141 depot flight test , engineering degree, and aircraft maintenance background had identified me for assignment to a test task force that would conduct the "fly-off" between the two AMST transports. *I was some kind of excited about that!* Even on Cloud Nine, you might say.

But as often happens in development programs and exactly like what is happening again today, the war in Vietnam was sapping funds and

affecting developmental programs. The AMST slipped to the point that my "frozen" status, waiting for the AMST, unfortunately became thawed. In late 1973 I received an overseas advisory duty assignment before the AMST test program really got started. BUMMER! I never got close to either airplane.

Of course. since I was never actually IN the program, I was never privy to details of test results. But from the outside looking in, I liked one airplane over the other, it would be the adventuresome approach Boeing had taken by using the Coanda effect with those two humongous turbofans.

But I had missed the program and by the late 1970's was retired, and soon after working at Lockheed. By the early eighties the USAF needed a replacement for the C-141's and had asked industry for proposals. Lockheed, Boeing, and McDonnell Douglas bid for the "C-X", and my first job at Lockheed was on their (losing) proposal for that larger USAF jet transport, which was won by McDonnell-Douglas with the C-17.

Our friends the Russians had much the same STOL requirement for a transport that could go just about anywhere. They DID produce a "Coanda-effect" transport, the successful An-72 built in the Ukraine by Antonov.

The developed production aircraft was the An –74. While the NATO code name for both aircraft is "Coaler", in Russia (and in its Ukranian homeland of Antonov) the popular nickname for both types is *Cheburashka*, from the prominent engine intakes reminding viewers of the oversized ears of a popular Soviet animated film character of that name.

The caption on this internet photo said “An-74 at North Pole” ...
...and I have no reason to doubt it.....

While considerably smaller than the YC-14, they have a remarkable resemblance to the Boeing. The aircraft are mostly used in Siberia and points north all the way to the North Pole(and south to the Antarctic) supporting all sorts of activities, flying off surfaces some of which are laughably called “runways” ....and even on skis.
https://en.wikipedia.org/wiki/Antonov_An-72
https://en.wikipedia.org/wiki/Antonov_An-74