



CFPA NEWS

Oct.
2013

The California Fire Pilots Association newsletter



(photo Jeff Holz)



News.



Tribute to the Martin Mars



Columbia, Then and now



Walt Darran, Airtanker Aviator



Douglas DC-7.



Air Spray, 45 years of firefighting.



This Newsletter is dedicated to Walt Darran; a true gentleman, a fine sailor, a fantastic aviator, a dear friend to every aerial fire fighter. So long Walt... We're going to miss you. Thanks for all your achievements and your inspiring actions in this life.

Tribute to all Jettison Areas where we practice and refine the art of aerial firefighting, for example, dropping in a toilet bowl on a rock in the Geysers."

(photo by Tony Houlemaard)



Happy birthday Neptune

Neptune aviation celebrated 20 years in firefighting industry. A fourth BAe146, Tanker #01 is being converted at Missoula. 11 aircraft should be modified to replace the good ol'P2V. Neptune Aviation is ready for the next 20 years to come.

(photo Cyril Defever)



News in Europe

A Casa 295 modified by Airbus Military made its first drop on October 17th. The belly seems to be modified...more informations next year.

(photo Airbus Military)



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Redaction and graphic design : Cyril Defever
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e-mail : jeromelaval@hotmail.com
Website : <http://www.calfirepilots.com/>**

Brothers and Sisters



The Ukiah Tanker Pilots Memorial has been established to honor the pilots who perished in the service of Mendocino Unit and the People of the State of California.

Please feel free to forward to anyone you know who may have interest or to members of the deceased pilots family members. Please feel free to stop by and see the memorial if you are ever in the area.

The memorial is in Honor of the Following Pilots:

1974 William (Bill) Benedict

1976 Bill Sears

1978 James Lippitt

1984 Ted Bell

2001 Larry Groff

2001 Lars Stratte

Best Regards,

Terry A. Guerrero
Battalion Chief
CAL FIRE
Mendocino Unit
Ukiah Air Tanker Base
Cell 707-391-6708
email Terry.Guerrero@fire.ca.gov

If anyone is interested in contributing to offset the cost you may contact me at the above email or cell number. Thanks



Tribute to an old friend

By Jimmy Barnes



As a young man Jay Martinak started his flying career as a warrior flying helicopters in Vietnam. When we met him he was flying helicopters as an aerial firefighter for the California Department of Forestry. In a very short time Jay rose to the rank of Air Operations Officer.

Jay was always someone we

could talk to that would listen. He was one of a handful of Officers that presided over the toughest transition period in the history of CDF's air program. On his watch the pilots and mechanics unionized. While at the same time we fought for and got the S-2T air tanker. These events saved the State's, fixed wing tanker program.

During these challenging days CDF's Aviation Management Unit of which Jay was a part met with pilots routinely to help pilots and mechanics turn a one-year at a time vocation into a career. even when the Deputy Director disapproved of those meetings Jay, Marshall, Dave, Rich and Mike continued a very positive relationship with pilots and mechanics. Their leadership paved the way for the air program CALFIRE enjoys today.

We were very lucky to have had such a great team of leaders in the Aviation Management Unit during those very tough days. They cared greatly for the air program and the people in it and Jay never swerved in carrying the message to his superiors in fire control, sometimes at his own peril. We loved him and are eternally grateful for all his help and council. Great organizations are the result of great leadership. Jay Martinak was a great leader, a great friend and an inspiration to us all. Thank you Jay, for everything.

Jay passed away Sept 29th.

So long dear friend.
Sincere condolences to Allison,
his family and friends. We'll miss
you Jay.

A true aviation legend...



Tribute to the Martin Mars

by Frédéric Marsaly

Photo Peter Killin

The first of heavy water bomber, long before the VLAT, the Martin Mars was designed as a naval long range patroller. The prototype flew in 1941, and quickly modified to serve as a troop transporter. The US Navy placed an order for 20 aircraft in 1945, reduced to 6 with the end of the war. These aircraft

with a MTOW of 75 tons can carry a load of 16 tons or 133 fully equipped soldiers but arrives too late for the war in the Pacific.

At the end of the 50's, the four surviving aircraft, nicknamed Marianas, Philippine, Hawaii and Caroline are phased out by the Navy. They are bought by a Canadian company which

converts them to water bombers.

The first modified aircraft, Marianas CF-LYJ is ready for the first fire of summer 1960 but on 23rd of June, she crashed killing the four men crew. The second aircraft, Caroline CF-LYM, is ready for the 1962 season and became a star when she stopped two fires. Sadly, a storm sunk her during fall on October 12th.

The last two planes, Hawaii and Philippine are modified and began their contracts for British Columbia in summer 1963. These aircraft can scoop 7000 US Gal (27 000 liters). The main difference between these aircraft is the tank drop systems, under the fuselage for Hawaii C-FLYL and on the flanks of the lower fuselage for Philippine C-FLYK.

In term of productivity, the most impressive performance is done by the Hawaï in the 80's with the delivery of 236 000 US Gal of water in 8 hours!



Photo-US-Navy

Flying for Forest Industries Flying Tanker, the planes are sold to Timberwest Flying Tankers but remain at Sproat Lake to continue their missions for British Columbia and, sometimes, other Canadian's Provinces. In 2006, Timberwest announced the sale of the both Martin Mars and in April 2007 Coulson Group, an important company, involved in Forestry and Firefighting business, announced the purchasing of the two water bombers to be operated by a group's subsidiary: Coulson Flying Tankers.

Sadly, due to an end of a contract, the Philippine Mars is grounded in 2007. Repainted in US Navy Colors, she will fly to US Navy Museum in Pensacola, FL. The ferry flight is now scheduled for April 2014.

Always contracted with BC, Hawaii Mars is also contracted for missions outside Canada, in California from 2007 to 2009, in the Los Angeles and San Diego area and, in April 2011 in Texas and Mexico. For this mission, the Hawaii Mars made 80 drops with gel – the Hawaii can carry 2600 US Gal of foam concentrate - noted as very efficient.

Early 2013, British Columbia province announced the end of contracts for Martin Mars after the fire season, ending in September and maybe marking the ending of its water bomber career, even if, according to Wayne Coulson : "We are still looking at options for Hawaii".

Martin Mars water bombers performed than 8 000 drops fighting more than 4 000 fires to this day.

Reliable, powerful with a real heavy load, an unmatched durability and productivity and with the legendary seaplane's gracefulness, Martin Mars is, for a very long time, a true aviation legend.



Columbia Then...

by Dan Dinneen



Dan Dinnen and Jim Dunn then...



Columbia



now...



Happy Retirement
Jim!!!

Walt Darran, AIRTANKER AVIATOR



By Chuck Lees

I first met Walt Darran while on contract at Paso Robles tanker base in 2001. CDF had told me I would be getting a retired airline captain as a partner there and I was, well, a little disappointed; I was hoping for someone with a more interesting background. A couple days later I was sitting next to my trailer under the oak tree when this scruffy "old guy" in a Hawaiian shirt and sandals approaches me holding a brown bag with a six pack of beer. We hit it off right away and it turned out Walt was not your typical airline pilot. In fact he was more like a

character straight from a Dean Tally novel. And he might be. Turns out almost 30 years earlier he had been under the same oak tree flying a TBM.

Walt was born in Easton, Pennsylvania in 1940. His father was a butcher and mother a secretary. As a young boy Walt worked on farms for pocket money and would occasionally visit the local airport and wash planes for rides, but initially aviation was not his

passion. After high school he visited the Navy recruiter to enlist. He did so well on the aptitude test he was offered a Navy scholarship to Penn State, and after graduation he served aboard a destroyer as Officer of the Deck for 18 months home-ported in Yokosuka, Japan. In 1962 Walt was selected for Naval Flight Training in Pensacola.



▲ Allentown, PA, with Mom, Dad, and brother Doug (USMC H34 pilot, home from Chu Lai).



He eventually checked out in the A-1 Skyraider and made two combat deployments to South East Asia as a carrier based attack pilot earning the Distinguished Flying Cross.

Walt has always been a bit of a wheeler and dealer; he managed to talk the Navy into a short tour "feet dry" in Vietnam with the Army's 1st Cavalry as an aviation observer.

Walt loved the Navy and claims he would have made it a career if he had been married. But as an ambitious bachelor in 1967 he had other ideas. When asked about his post naval career ambitions he laughs and with no regret says, *"Adventure...more money, faster horses....younger women. Nothing intelligent, well planned, or thought out."*

In 1967, one day after leaving the Navy, Walt joined Air America and was on a plane to Taiwan for initial training then on to Thailand to fly. Things with Air America were winding down and he soon jumped ship to Continental Air Services to get into the STOL program flying Porters in Laos. It was here he started to meet air tanker pilots who at the time were being hired away from jobs in the states to fly covert ops. Two years later Walt met a "gorgeous blonde" in Copenhagen while on leave from Continental Air Services and before long was a married man back in the states.

"I thought I would get back to the states and the airlines would be banging down my door," he explained, "but I got back to California, looked around and said whoops! I ended up with a job towing gliders for 50 cents a tow in Calistoga."

Walt took a lot of "odd" jobs over the next two years while flying jobs were scarce. In Kwajalein he flew the DC-4, Caribou, and Electra for Global Associates.



▲ 1966, An Khe Vietnam with the Army's 1st Cavalry..



▲ "Attapou, Southern Laos, 1970, Continental Air Services Pilatus Turbo Porter. The bad guys had the strip covered, so I got clever and landed on a road and taxied into town behind some hootches. Unfortunately they had that covered too, and soon after this was taken they started walking mortar rounds up the street. I decided it was time to depart, clipped a wing-tip on overhanging trees on take off as an alternative to catching a round. Pissed me off. So I called in some USAF air support that upset their day."

▼ Hmong Friends in way North Laos, 1969.





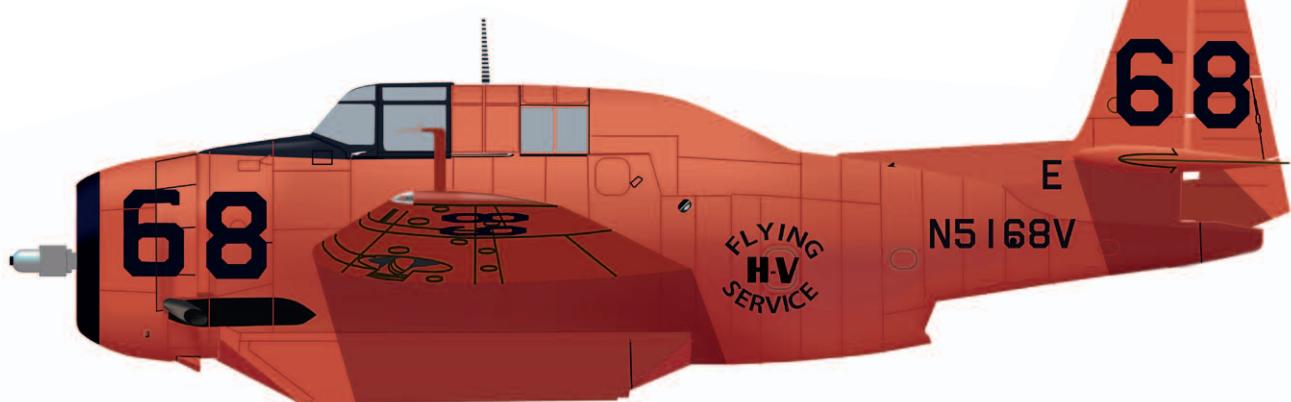
▲ Walt with Ralph Stanbaugh, base manager, Pottsville, PA, spring 1972.

◀ Jim Venable & Walt with first S2A, spring 1973, Hemet.
(Picture Bob Lawson)

▼ Walt, Paso Robles, 1971.

Other small jobs came and went and he finally landed a co-pilot seat in a PBY airtanker at Hemet Valley Flying Service in 1971. Since they had lost a couple pilots to accidents the year before they also checked him out in the TBM as a spare pilot when he started. Fortunately for Walt a fellow Hemet Valley TBM pilot decided to buzz a drag strip during a race and the boss happened to be in the stands. The next day Walt was a Tanker Captain, even though he had never been to a fire before. Walt went on to fly nine fire seasons in TBM's, B-26's, S-2A's, C-119's, Stearmans, and PBY's.

Looking to broaden his horizons in 1979, he signed on as co-pilot on a B-737 for AirCal and thus began a twenty year airline career. In 1987, AirCal was bought by American Airlines and Walt eventually checked out as Captain on the B-737, MD-80, DC-10, and international A300-600R Captain until mandatory retirement at age 60 in 2000. It's interesting that someone in search of so much adventure would wind up flying for the airlines. Walt explains, "Fire flying was great back the 70's but the money was horrible, about \$10,000 a season was the average (1976) and a lot of guys were getting killed. I wasn't excited about the airlines but it turned out to be OK; good training, you still had the dark and rainy nights for occasional thrills, and I love airline food! Very gratifying." As it turns out airline flying was the perfect complement to Walt's life style. It gave him a sense of accomplishment along with the money and time off to pursue other interests like sailing, traveling, and more flying.



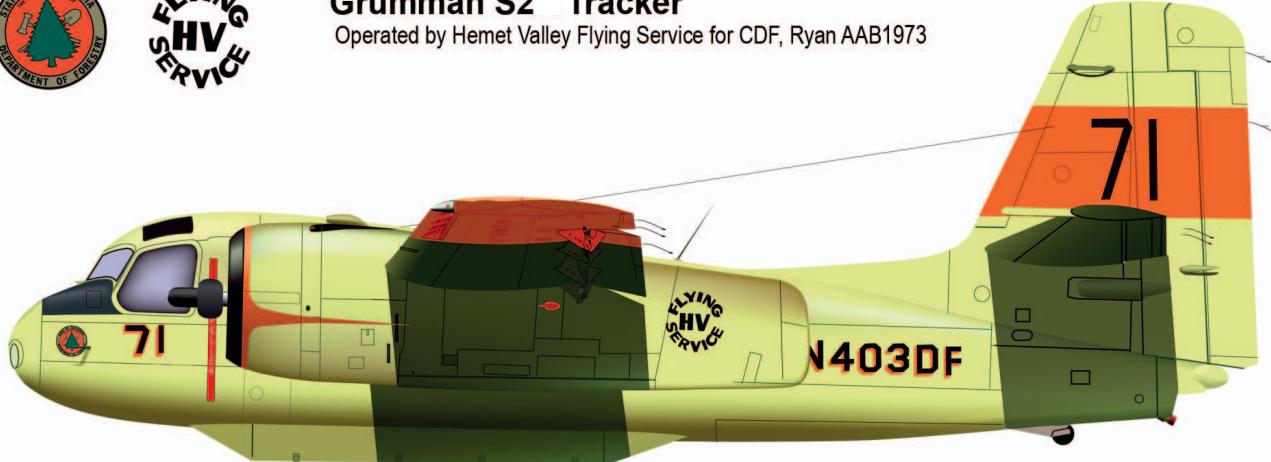
Info graphic Cyril DEFEVER 2013



FLYING
HV
SERVICE

Grumman S2 Tracker

Operated by Hemet Valley Flying Service for CDF, Ryan AAB 1973



Infographie Cyril DEFEVER 2010

It also gave him the opportunity to meet his present wife Christine. Christine met Walt on a layover in London in 1999. She was a flight attendant working for American but like Walt had an equally exciting pre-airline career. In her teens she became a New York model and eventually Paris, where she was cover girl on over a dozen top fashion magazines like Vogue and Elle. She lived a good portion of her life in Brazil, where she still has a home, and speaks five different languages.



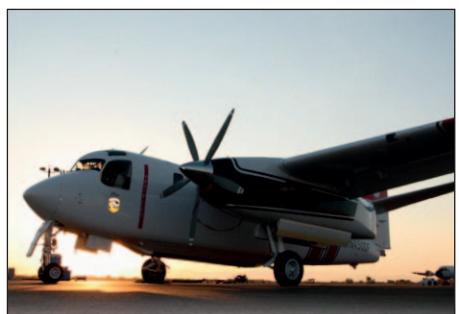
Walt has two sons by a previous marriage; Jay is a Merchant Marine Captain and Scott is a Navy Helicopter Pilot, father to Walt's two grandchildren.

Retirement gave Walt more time for sailing but he wasn't ready to quit flying. In 2000 he got a job flying single engine Ag-Cat air tankers for Downstown Aero in New Jersey and in 2001 was hired to fly the S-2A for CDF and moved to Chico, eventually transitioning to the S-2T. Walt will tell you that things in the air program changed greatly since the "bad ole days." After nineteen seasons as a tanker captain, Walt retired from flying in 2009.

Walt continues to be active in AAF, as he has been in the past with AAP and other aerial fire fighting organizations involved in training and improving safety for pilots. He has 17 type ratings and 25,000 hours (1500 helo) over a 48

year professional pilot career that would take two volumes to cover in detail. It's obvious when talking to Walt that his fondest memories are of people and camaraderie, not necessarily airplanes and flying. He has had an aviation career and life that most pilots can only dream of, and one that would be hard to duplicate today by the most ambitious pilot. Walt Darran truly embodies the Aviator pioneering spirit and will continue to be an inspiration to all that follow.

Cheers Walt



Up close and personal



Coll. Larry Kraus

with DC-7 Airtankers

Final part

This serie of articles is an interview of Captain Larry Kraus by Tyler Miller

You can follow Tyler's blog about aerial firefighting :

<http://randomramblingsfromnj.blogspot.com/>
power plant specifications



photo Cyril Defever sept 2008

As I was looking around on the web recently in Dec. of 2009 to learn some history of the Douglas DC-7's when I ran across a couple of references to power

plant (engine) specifications for the four engines on the DC-7. The specification was as follows:

4x Wright R-3350 18EA1 Turbo-Compound radial piston engines, 3,400 hp (2,535 kW) each

Now because of the reference to a 3,400 hp engine, I suspected that these power plant specifications were for the DC-7C not only that but some of the other specifications (not listed here) did not match those that Larry had sent me earlier. They appeared to be for a slightly bigger and heavier aircraft. So, I sent Larry Kraus an e-mail, I include his response below. But first I want to thank Larry for the time he took to write me and walk me through the incorrect power plant (engine) specifications. I am now slightly better able to read power plant specifications in the future. Here is what Larry says:

Larry Kraus: "Our engines are a mix of civilian and military engines. The civil engines are either DA4's or EA1's. With 115/145 avgas, the DA engines were rated at 3250 hp. The EA's were used originally on the DC-7C and had some localized strengthening of the crankcase and improved mounting flanges for the PRT's that allowed an increase to 3400 hp (the C model was larger and considerably heavier than the DC-7. I think that the max take-off weight for the C model was 142,000.

said to have been worth 150 hp at take-off power."

We also use R-3350-42's and a couple of other dash number Navy and Air Force engines that were used on WV-2's and C-121's. These were military versions of the Lockheed Constellation. The P-2 also uses very similar versions of the R-3350. All of these engines are the Turbo-Compound models with the PRT's (Power Recovery Turbines). There are 3 PRT's per engine. They are similar to turbo-superchargers in that they use engine exhaust to spin a turbine wheel, however, instead of the turbine wheel being attached to an air compressor (to boost the air pressure at the carburetor), the PRT's are connected directly to the engine crankshaft via a fluid drive something like an automatic transmission in a car.

The main difference between the DC-7 engines and those in the P-2 is that the DC-7 engines use direct fuel injection with an injector on each cylinder and the P-2 engines use a single large injector into the eye of the internal supercharger that's driven by the crankshaft. I don't remember all of the dash numbers for the 3350 military engines that we use, but if it matters, I think that I mentioned it in my WIX thread somewhere. These are large engines with two rows of 9 large cylinders (18 total). R-3350 means a Radial Engine with a 3350 cubic inch capacity (the internal volume of the cylinders). A large 8 cylinder car engine might be 350-400 cubic inches..

The main point being that all of these engines (DC-7 and P-2) have been de-rated to 2880 hp while using 100 octane fuel. I'll attach a cutaway of a DC-7 engine from the Douglas manual (above) that gives a view of the PRT drive. It's a bit complicated, but the PRT's really do recover horsepower that's just going out the exhaust. With the 115/145 power, each of the 3 PRT's is

Weights of aircraft

- Gross weights: The weights of Butler's DC-7's are 113,000 pounds gross with 100/130 avgas. The actual design gross weight was 122,000 pounds gross with 115/145 avgas (no longer easily available). According to Larry Kraus: «the difference is due to reduced horsepower available with the lower power settings allowed with 100/130 avgas. Our take-off power with the higher octane 115/145 avgas was 3,250 power per engine. It is 2,880 with the reduced power settings.»
- Landing weights: Landing weights for Butler's late models DC-7's (T-62, T-66) is 100,000. Larry says that T-66 (a DC-7B) «had some structural reinforcement around the landing gear and also for the flaps.» The landing weight for Tanker 60 is 102,000. That airplane has the same power reduction as the straight seven's, so the maximum take-off weight for Tanker 60 is also 113,000.
- Normal take-off weight loaded with retardant: 108,000 pounds.
- Turning diameter (on the ground); I have seen references to the turning radius in specifications of various tankers, so I asked Larry about this. It turns out that the spec that I had from one of the USFS documents (72 feet 8 inches or a diameter of 145 feet 4 inches) was close. I was interested in his comparison of the turning diameter of the DC-7B with the turning diameter of the C-118A (the military equivalent of the DC-6B). He sent me a copy of the turning radius page from the only DC-manual that he has available along with a manual page showing the equivalent information for the C-118A because it shows that the outer wing tip clearance is 74 feet. I want to point out here that the simulator that Larry and his co-pilot use is a C-118A simulator. This is what Larry had to say about turning radii:

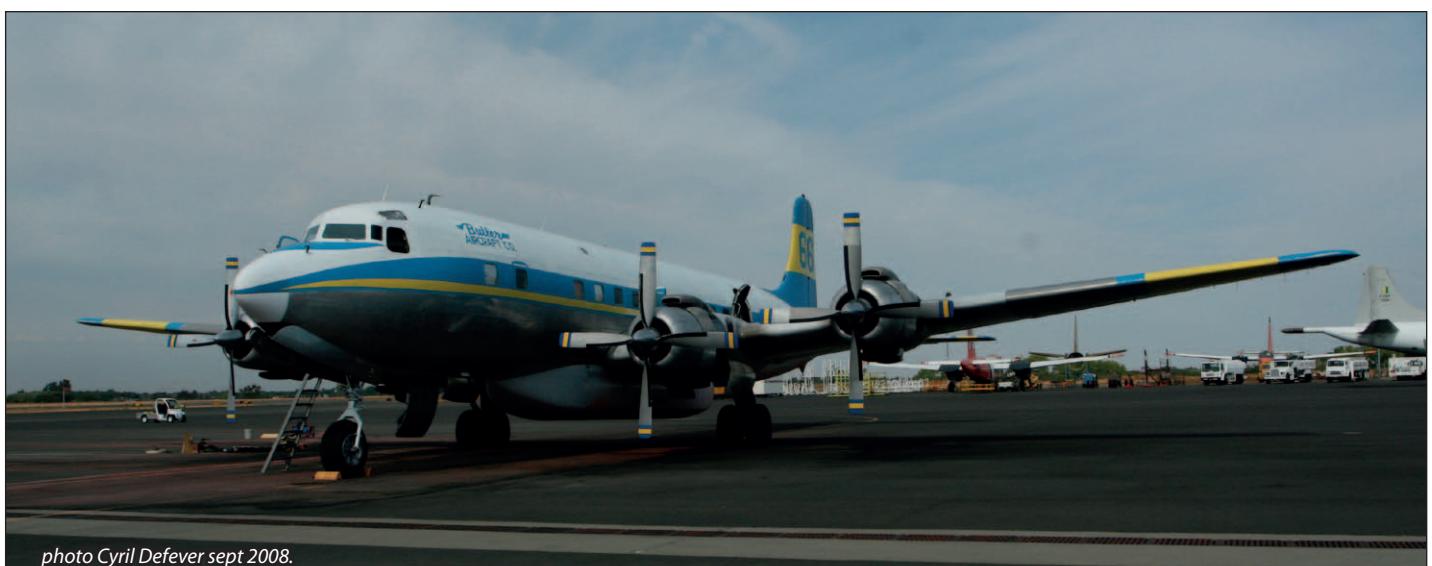


photo Cyril Defever sept 2008.

Larry Kraus: "This is close to what the USFS info gave for the DC-7. As you can see, it all depends on what you use as a basis for the turning radius. The reason for the slightly larger radius for the DC-6 vs the DC-7, even though the DC-7 is slightly longer with the same wingspan, has to do with the nosewheel steering limits. The DC-7 nosewheel turns 71 degrees either way and I think that the DC-6 only goes 67 degrees."

As you can see, The turning diameter of the DC-7B is 142 feet 5 inches and the turning diameter of the C-118A is 148 feet 2 inches. It's tight enough that the airplane doesn't pivot around a locked wheel on the inside of the turn. The inside wheel actually turns backwards. It still amazes me sometimes how tight of a parking spot you can get the DC-7 out of using maximum nose wheel steering."

Fuel Capacity

Larry Kraus: "The DC-7 and DC-7B with the larger capacity fuel system (top in the above page from the Douglas manual) can carry 5512 gallons of fuel. That's the capacity on Butler's 7's. Our normal tanker fuel load is between 500-600 gallons per engine in the main tanks and 50-75 gallons per engine in the alternates. That allows between 3.5 and 4.5 hour flying. Our oil tanks also hold 46 gallons of 60 weight oil each. Avgas weighs 6 pounds per gallon and oil is 7.5 pounds per gallon."

Retardant Capacity

Butler's DC-7's can carry up to 3,000 gallons of retardant.

Conclusion

What can I say about this magnificent airplane, her pilots, co-pilots and all those behind the scenes who keep Butler's three DC-7 tankers in the air, flying fires? I can say that I feel an affinity for these tankers because of their original service as commercial airliners. I don't know if I ever flew on a DC-7, but I was a passenger on planes of a similar size and vintage. So, in some sense, even before I began the series on the DC-7, I had a relationship with these aircraft.

What I have gained from

writing about these aircraft is a love for these three tankers. Three tankers that I call magnificent. It has been a joy to get to know these tankers up close and personal. I also know that these tankers are loved by their pilots, co-pilots, those in the shop who maintain the planes, and the ground crews. A bond between humans and aircraft that ensures that these fire engines in the sky are flying. A bond that ensures that some of us can get to know these magnificent aircraft up close and personal.

Larry Kraus: "We have a bond with the other fire fighters that we work with, both in the air and on the ground. There is a mutual respect similar to that which develops in a military unit that has been in combat. It's always a pleasure to work with people who know their jobs. We all know that we can depend on each other and we do so every day. There's a great deal of satisfaction in being a useful part of that team."

Nothing is simple in the world of flying tankers, those fire engines in the sky. I have learned a lot in writing this series about the DC-7 See, I told you it is complicated, Nothing is ever easy in the tanker business.



Photo Bill Rugg



Airtank art

STEVE WHITBY ©



Steve Whitby



STEVE WHITBY, OI



45 Years of aerial firefighting with AIR SPRAY

Incorporated in 1967, Air Spray's first contract for forest fire suppression was awarded by the Province of Alberta in Canada to provide wildfire suppression using one B-26 air tanker and one Cessna 310 "bird dog" or "lead plane" aircraft. The company founder, Don Hamilton flew the bird dog aircraft and his

partner, Don Harrington flew the B-26. After a couple of successful seasons Don Hamilton bought out his partner and became the sole owner of the company. In 1973 Air Spray was awarded a contract by the Yukon Territories for two more B26 air tankers and Cessna 310 bird dog aircraft. The success of those first two seasons led to

the expansion of the company to secure seasonal contracts with not only the Alberta and Yukon governments, but the British Columbia and the Government of Canada as well. Over the years the fleet grew in size to as many as twenty six B26 air tankers and twelve birddog aircraft operating under contract with service provided to the Governments of Saskatchewan, Northwest Territories and the United States.

In 1986 Air Spray was awarded a contract by the Alberta Government for the operation and maintenance of their four Canadair CL215 aircraft. Air Spray operated and maintained the four aircraft for 17 years. Following the success of the CL215 operation, Air Spray purchased In early 2009 the CL215 aircraft were sold to the Turkish Aeronautical Association (THK) which operates as an agent of the Turkish Government.



As part of the sales agreement, THK asked Air Spray to aid in the establishment of their CL215 program. This meant providing pilots, maintenance engineers, spare parts and most importantly training to help their CL215 program. Air Spray still shares information and technical advice as needed to aid in the success of their CL215 operation. Despite the success of the B26 as a workhorse for wildfire control, by the early 1990s Air Spray's customers were looking for a newer land based aircraft with a larger capacity tank and a turbine engine. Air Spray met their request with the introduction of the Lockheed L188 Electra.

Formerly a passenger aircraft, the Lockheed L188 Electra turned out to be the perfect aircraft for the heavy air tanker role. With four powerful turbine engines, a cruise speed of 330 knots with a full load of retardant and fuel endurance of 4.5 hours plus reserves, the L188 Electra was the ideal aircraft for initial attack of fires a long distance from a tanker base or for extended periods of time working a fire. The four powerful Allison engines also provided an extremely high measure of safety, particularly while working fires



in tight mountain valleys. While Air Spray originally matched the fast L188 Electra with a Citation Jet as a lead plane, Air Spray eventually determined the Turbo Commander 690 (TC 690) to be the ideal aircraft for the role. The high wings provide excellent visibility for the pilot and the air attack officer directing operations. Additionally with a fuel range of 4 hours plus reserve and a normal loaded cruise speed of 260 knots, the aircraft's range and speed are perfectly suited to the fast speed, maneuverability and long range capabilities of the L188 Electra air

tanker. Additionally the TC 690 is an executive aircraft built for comfortable business travel. Fitted with climate control, leather seats and spacious cabin interior, the TC 690 is an excellent aircraft for extended periods of work. With the development of the L188 Electra as an air tanker, Don Hamilton envisioned a large capacity, constant flow tank with doors controlled by a computer from the cockpit of the aircraft. To help with the design and to build the tank, Don Hamilton approached his long-time friend and business associate, Dale Newton of Aero Union in Chico, California to manufacture a tank that would surpass the existing 12 door tank currently used by the industry on some air tanker aircraft. After certification by Air Spray, the RADS (Retardant Aerial Delivery System) was installed on the L188 Electra. The design was unique in that it consisted of two doors operated by an on-board computer to control the amount of the opening releasing the retardant at any one time. The precise control meant that the aircraft was capable of laying everything from a straight line to a full drop of retardant to better control the wildfire.





Air Spray currently operates three L188 Electra and TC 690 groups working for the Province of Alberta, three L188 Electra and TC 690 groups working for the Province of British Columbia, one group in the Yukon Territories and a single L188 Electra air tanker in the Northwest Territories. In 2013 Air Spray also signed a "call when needed" contract with Cal Fire for multiple L188 Electra air tankers as needed

Don Hamilton passed away in 2011, just two months after his induction into the Canadian Aviation Hall of Fame. With his passing, the reins of the company passed to his daughter Lynn Hamilton. Having been involved with the company throughout her life as both company lawyer and then President and CEO, the

generation" air tankers. To meet the needs of their customers, Air Spray has purchased two BAe 146 jet aircraft for conversion to the air tanker role.



Due to the need for qualified staff and space needs, Air Spray chose to do these conversions at one of the vacant Aero Union hangars at the Chico Airport using a number of former Aero Union staff. Key to the conversion

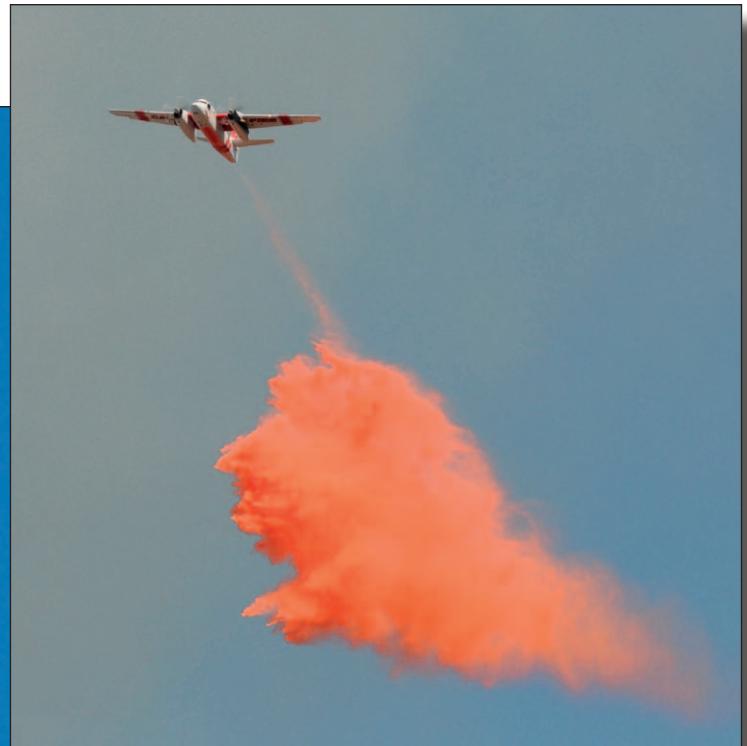
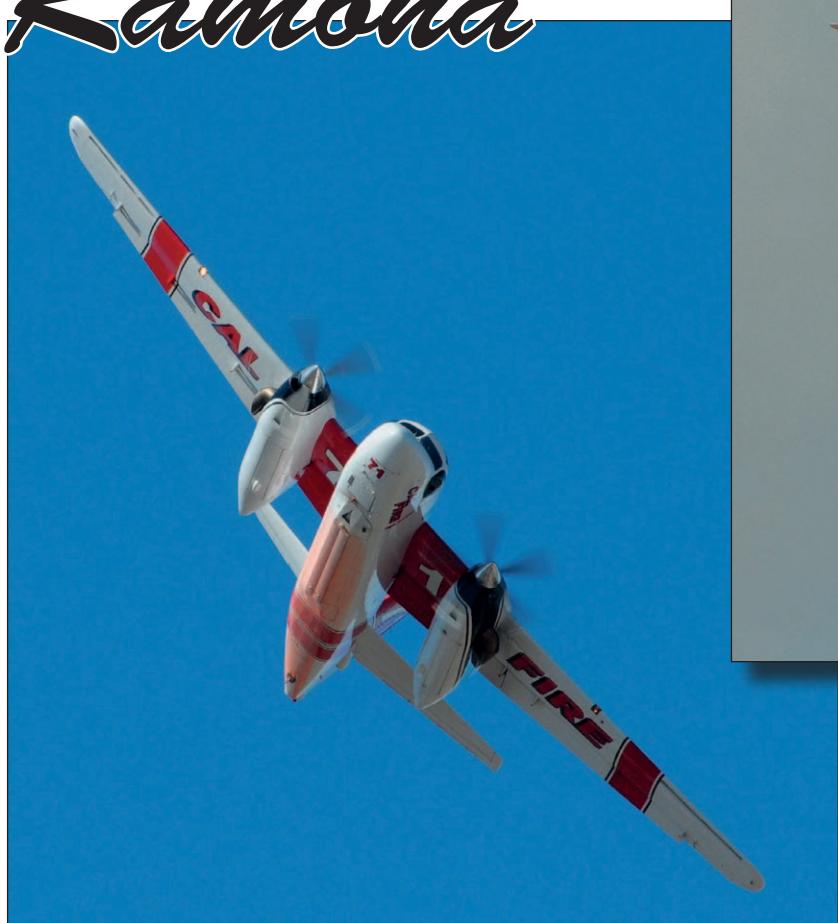
is not just a new air tanker platform but the development of the "next generation" tank. With a new design unlike any other tank currently in existence, the result will make the new BAe146 air tanker the ideal aircraft for wildfire control.

Air Spray's years of experience has earned it the reputation of being one of the leading aerial wildfire control companies in the world. Throughout the years Air Spray has provided reliable service and continually fulfilled all commitments to its customers in the most cost effective manner possible. Air Spray's integrity in fulfilling its commitments plus emphasis on safety, innovation and quality service are the primary reasons for Air Spray's success.

As Air Spray continues its next 45 years of service, the fundamental corporate values of safety plus service will always remain the same. However with the changes in the industry, it is the intention of Air Spray to not only keep up with changes but actually lead development for the future. Air Spray is looking forward to the challenges the future holds as it embarks on a new chapter in its history.



Ramona



by Jeff Holz



AFF

Aerial Fire Fighting

Sacramento, USA | 19th - 20th March 2014

tangent
LINK
Connecting Business

Wildfire prevention & suppression! the next generation

19th - 20th March 2014

Sponsor & exhibitor packages selling fast
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**For further information, please click on the link bellow :**<http://response.gv-c.com/Mail/View/166?a=252CD788C6A5DC5D974C37134A9DD5FA&r=716C18E4B4515A451E59F20D027DF39A>**Grumman S2 Tracker**First one to be converted by Hemet Valley Flying Service
for CDF, 1973**40 years of Tracker in California**

In 1973 Woody Woodmansee and Walt Darran started the first of many seasons with the Stoof at Ryan ATB. The concept proved to be reliable!!!

Some interesting links*(click on the blue link)***Conair BAe 146 Fireguard 160 drop...**http://www.youtube.com/watch?feature=player_embedded&v=cx794fx-w2l#t=60**Tribute to the fallen crew of 43 grupo (Spain) :**
<https://vimeo.com/76751229#>**The mighty Mars :**<http://www.youtube.com/watch?v=grsLtHtRmiE>**A**erial Fire Fighters,

Thanks for your contributions to keep this Newsletter interesting.

This winter please put aside relevant pictures or articles for next year.

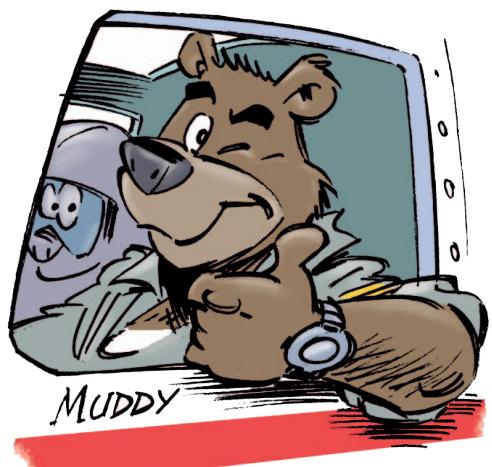
Special thanks to Cyril Defever and Fred Marsaly for their consistant work of great quality.

It's been a long fire season and it's not totally over yet. Enjoy the winter and see you in 2014 for another interesting, challenging fire season.

To Jim Dunn; have a great retirement! Please keep in touch.

Cheers!

Jerome

**See you for
2014 season**T. BIRBAUD
CFPA news