Title: Defective seal on H6 cam chain covers due to paint contamination.

Engines Affected: H6 engines with painted cam chain covers

**Summary Statement:** H6 engines with painted cam chain covers (rear engine cover) may experience oil leaks if paint exists on the sealing surface between the engine and the cam chain cover. The potential leak will become apparent after the engine has been run and warmed up a few times. Correction of this condition requires removal of the engine from the aircraft and removal and reinstallation of the cam chain cover.

**Problem Discovery:** Robert Paisley was assisting Ron Collette with ground test runs of Ron's H6 motor mounted to his Sportsman 2+2 airframe. Suddenly a gross oil leak was detected across the entire bottom of the cam chain cover. The problem did not become readily apparent until the engine had been started and warmed up a few times. Engine Owner: Ron Collette. Location Cable Airport (CCB), Upland CA.

**Discussion:** The rear engine cover (cam chain cover) was removed and painted by the Egg factory as part of the engine beautification. The paint that was applied was sprayed onto the sealing surface that mates to the engine case. There is also overspray on the inside of the cover inside the engine oil area. The painted sealing surface caused the cover to not be sealed properly with the engine case resulting in a gross engine oil leak across the entire bottom of the cam chain cover. The problem did not become readily apparent until the engine had been started and warmed up a few times.



**Corrective Action:** If paint contamination is suspected the cam chain cover needs to be removed from the engine. All paint and old sealer needs to be removed from the sealing surface of both the cover and the engine case. Overspray should be removed from the inside of the cover. The cover should then be reinstalled using an appropriate sealer such as Permatex #85144 which is sold at auto parts stores under the name "the Right Stuff".

Submitted by: Robert Paisley

## Members and their Projects....



## Ron Collette

Ron, age 70, worked as a general contractor for most of his life, but got hooked on flying at an early age. Since 1977 he got involved with ferrying factory built aircraft to destination airports. This included at least 20 Citabrias. and several Huskies, C-182s, Symphony's, etc. He loved the flying characteristics of the Symphony and wanted to build something like that with more hauling capacity. He chose the Sportsman 2+2. He said this was the 2<sup>nd</sup> most popular kit behind the RV models and had a great reputation and good factory support. Cost of the kit was about \$45K and you could also sign up for the "Two weeks to taxi" program. You could also buy the assembled kit (less engine) for about \$80K. It has a 145 Kt cruise and 1,000 Ib carrying capacity with a large sized cabin. Fuel capacity is 50 gallons and it uses 8.5 gph. All this makes it ideal for the types of fishing and cross country trips Ron plans to go on.

Ron has been friends to Robert for some time (on the same airport) and liked what he saw in Robert's plane. He ended up buying one of the E-6 200hp engine packages from Robert. (Recall that Jan Eggenfellner had given Robert a few of these engines as payment for all the development and test work that Robert been doing for him). Ron guickly found that Eggenfellner would not give him any support for that engine...telling him to see Robert instead. One problem was the engine mount. Although it was configured by Jan to fit a Sportsman, the interface dimensions of the mount attach points to the firewall were off and would not fit. Ron's having a expert welder come in a look at how to modify this powder coated mount. In addition Jan will not sell Ron a prop, so he ended up paying \$11.5K for a prop directly from MT. He said at least he could order the color he wanted (note the black prop in the photo above). Ron has also chosen to use Robert's new Bus Manager for his airplane. (More will be written about this in the next newsletter). If things go right, Ron hopes to have his plane up and flying by year's end.

## **Editor's Note:**

The spotlight column to the left on Ron Collette was taken from the 3<sup>rd</sup> Subenews newsletter. After discovering the problem, Ron was quite upset and wrote me the following email.

I do not have to tell you how I feel about Jan, and his total lack of follow thru with already sold engines and props. He did all of this negative response to himself. Here is another part to TOTAL lack of Quality work put out by Jan. The rear timing chain gear box cover was not properly sealed. The cases were sprayed with white paint then a very small amount of some sort of sealant was applied...cases put together and they called that good. NOT! I am very fortunate that this was found out prior to flight, as the oil leaked badly. Let your imagination take over from there as to the results that could have happened. I would ask any one who has an ES200 to stop and really take a good look at the cases and better yet take it off and properly seal them.. The engine is very good and is a great item for RVs and the Sportsman. It is the person that is doing the work that needs to get a grip on GOOD MECHANIC skills. NO quarrels with the product just the Man...Less than PRO-**FESSIONAL** 



