



Memorandum for Record

Fabian Salazar
Air Safety Investigator
National Transportation Safety Board
Investigator in Charge

NTSB Accident Number: WPR20LA189
Aircraft Registration & Make/Model: SA-342J / N342J
Accident Location: Minden, NV
Accident Date: June 21, 2020

Paul Etienne
Safran Helicopter Engines

In an email dated January 3, 2022, Mr. Etienne provided maintenance information for the Turbomeca Astazou engine, and the accident engine.

Astazou XIVH SN 64162 last 250h/24 month should have included :

- Calendar limit surveillance (*exceeded*)/TBO surveillance/life limited part surveillance
- 25, 50, 125/yearly, 500/24 months inspections, and, according to engine TSN, the 1000H inspection at 5000h tsn;
- 25 hours spectrometric oil analysis (recommended);
- 2 years/1500h engine oil change;
- 50 hours engine electrical magnetic plug inspection;
- 50 hours engine cleaning, (daily rinsing, weekly washing/25h and monthly/50h cleaning if sandy atmosphere) ;
- **25h T4 surveillance** (AH service letter), considering the reported event (T4 raise), this specific task matters; the interval should be reduced if environment is sandy ;
- Special checks depending on usage/event.

Mr. Ettienne added the following information.

Astazou XIVH TBO and calendar limit:

AST XIVH has a calendar limit of 15 years, an overhaul in a Safran HE repair center is necessary at this periodicity.

AST XIVH has a TBO of 1000hours, that can be extended up to 1750 hours, depending on engine configuration.

To our knowledge, the last repair of the Astazou XIVH SN 64162 in a Safran HE repair center was in June 2009 at 4986h TSN. As a consequence, the certified calendar limit was exceeded.