DEPARTMENT OF THE AIR FORCE
AIR FORCE HISTORICAL RESEARCH AGENCY
MAXWELL AIR FORCE BASE, ALABAMA

13 Sep 2005

AFHRA/RSA
[redacted]
Maxwell AFB AL 36112-6424 USA

LTC Paul Cecil USAF (Ret)
[redacted]
Round Rock TX 78664

Dear Colonel Cecil

Thank you for your letter. We have attached the 12th Special Operations Squadron history for Oct-Dec 1968, extracted from the history of the 315th Tactical Airlift Wing.

We hope this information is of value to you.

Sincerely

ARCHIE DiFANTE
Archivist, Archives Branch

Attachment:
12th SOC History

[redacted]

Info removed by the VNCA

16 Nov 66

FROM: 12th ACW/[illegible]

SUBJECT: Calibration Data for UC-123 Herbicide [illegible]

TO: AFLC (LA Group)

1. Your letter of 25 October 1966, subject, Transmittal of [illegible] Information, offered to help us solve problems in [illegible]. We have problems that minor R and D work can solve.

2. First, I need calibration data on rate of flow of [illegible] agents through the A/A45Y-1 internal defoliant [illegible] on the aircraft sent to us in September 1966. [illegible] the tail boom equipped with 3/8" orfice nozzles as [illegible] as listed in [illegible], of T.O. 1[illegible]-2. This T.O. does not recognize [illegible] booms and claims a 250 foot swath using only what we [illegible]. The original Hayes-[illegible] 30 foot boom has been discarded [illegible] since 1964. This outfit has been using two each wing booms [illegible] with twelve 3/8" nozzles and a tail boom 20 feet long with [illegible] at each end. With this configuration and maintaining [illegible] we get results like this in emptying the tank of 950 gallons [illegible] at 135K:

a. Orange 3 to 4 minutes

b. White 4 to 7 minutes

c. Blue Unknown because it is untested.

3. You can quickly recognize that the application per acre [illegible]. An earlier local study of pumping water through the system [illegible] rate to be 183 gallons per minute through the wing booms and 97 gpm through the tail boom for a total of 280 gallons per minute.

4. I need to know:

a. How much increase in flow will result from each additional nozzle on the wing boom? This is needed for each of agents orange white & blue because of their different viscosities in the 80° - 100°. temperature range

b. How is the total rate of flow affected for each by using 1/4 inch nozzles instead of 3/8 inch?

c. What ratio of the total flow should go out [illegible] uniform coverage for the width of the swath?