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FINAL REPORT

FOR

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Technical Assistance to the Government of Chad
in the Development of a Detailed Grasshopper
Control Operation Implementation Plan

FOR SERVICES UNDER AID/OFDA CONTRACT

NUMBER FDA-0064-0-00-0046-00

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Summary

This report describes the purpose and accomplishments of the trip. My job as an entomologist experienced in aerial control operations was to serve as the Aerial Treatment Specialist on USAID's grasshopper/locust control project in Chad from July 1 to November 1, 1987. The actual job varied considerably from the Scope of Work items originally provided me by the Consortium, as indicated in my July report. All of July and August were spent in waiting while a contractor, aircraft and aircraft approvals were obtained. Due to the extensive delays in obtaining the aircraft and having them approved for spraying I was involved in several different pesticide related activities in addition to those associated with this project.

When the aircraft and pilots were finally ready it was made clear that my job was to be a very perfunctory one. My assessment of the risks, benefits and (personal) costs were causes of concern.

I felt very strongly impressed to leave Chad. I left N'Djamena on Sunday, September 6. On Monday, September 7, one of two Libyan bombers was shot down over N'dJamena and Abeche' the center for our air operations in eastern Chad, was bombed.

Central Text

The purpose of this trip was to provide the services of an experienced entomologist to serve as the Aerial Treatment Specialist on a grasshopper/locust control project in Chad. Work Requirements specified in the Scope of Work were largely outdated prior to my arrival and during my stay in Chad. The project related work involved estimating actual spray flight time, making updated projections of probable treatment areas, and estimating required pesticide amounts by locations. Other assistance involved obtaining or actually providing equipment necessary to conducting aerial operations and ground support such as maps, spray equipment parts, maintenance, safety and first aid materials, office supplies, cooking and camping equipment, food, emergency locator transmitters, emergency flares and mirrors, survival kit, water filter, Search and Rescue and Safety Plans and spray aircraft flow rate calibrations. Contacts were also made or provided to obtain necessary FAA clearances for one of the spray aircraft. In addition, I provided advice and assistance with regard to pesticide drum disposal planning, pesticide storage and handling recommendations and pesticide registration status.

Only one field site, Abeche', was visited. That overnight trip was made to have locust experts meet with local government officials and discuss the current and projected situation. The locust experts also made a brief survey-detection flight.

I attended various meetings between USAID and Chadian government officials as well as meetings with the aerial contractor and spray pilots. I also met with various grasshopper/locust experts and discussed survey and control procedures and strategies.

At the time that I left, my job was to meet with local Chadian officials and through my interpreter find out what areas they wanted sprayed. Then I was to give that information to the pilots. All facets of the spraying program itself were the province of the aerial contractors. Essentially, my contributions would have been those that my interpreter could make by himself.

My primary observations and recommendations are as follows:

1. USAID ADO Fuller and Habib Khoury's well done early survey efforts and pre-positioning of fuel and spray materials were crucial to the project.
2. Tailoring the contract to a local general aviation contractor and aircraft rather than soliciting bids only from established aerial contractors resulted in excessive delays and much frustration on the part of both the government and the contractor. The contractor was, however, well experienced in general aviation and

did provide not only the required modified and specialized aircraft called for in the contract, but also obtained a second specialized spray aircraft.

3. The spray project was another job added to already full job loads of both the contractor's and government's local representatives. This overload, competing job demands and travel schedules prevented the necessary day to day communications that are so helpful to early and full project preparation.
4. Differences between this contract and project compared to other agencies contracts and operations were quite pronounced. For example, USDA APHIS 1987 grasshopper contract's Section II.F. states that "No passengers will be carried in application aircraft." That is also the case in USDA Forest Service contracts. USAID sought and received permission from FAA to carry passengers in its spray-observation aircraft. The Forest Service does not permit the use of old (last year's) stored aviation gas in its aircraft. On this project, it was agreed between the government and the contractor that such gas would be used; not in the spray aircraft, but in the observation aircraft. Water barrier filters are not used when pumping aviation gas from barrels in the African bush. Low level (15 to 30 feet above the ground), slow speed (70 m.p.h.) flights enabling views of individual grasshoppers on bushes were made by the pilot. The pilot stated he often flies other clients in a similar manner. (The pilot is exceptionally well qualified and capable. Both the pilot and his organization have an excellent safety record.)

Section H.2.(a) of the USAID contract states the contractor shall have complete authority to decide all matters connected with flight operations.

Section 1, Item L. of USDA APHIS 1987 grasshopper control contract states:

"Height of flight. The height of flight for each category aircraft on each program will be specified by the COR."

5. Section 3.03: (1) of the USAID contract states that "Flight hours shall be measured from first lift-off to final touch down . . . including refueling." I believe one of the clauses under Section I. of the contract makes reference to the use of a Hobbs meter to determine actual aircraft operating hours. We clarified with the contractor that only actual flight hours would be considered.
6. Financial constraints precluded the consideration of helicopters on this project; however, helicopters are used in other African nations on similar projects and are routinely used on aerial spray projects in the United States.

7. The aerial contractor and I were extremely and understandably frustrated by the conflicting attitudes of two U.S. Government agencies. On one hand, USAID was pressuring him to quickly obtain the contract required FAA certifications. On the other hand, FAA's inexcusable buck passing, foot dragging, indifferent response ended, and then slowly, only after USAID had the Office of Foreign Disaster Assistance put pressure on the FAA.
8. There were numerous security and safety problems in Chad apart from those normally associated with aerial spraying. Lybian-Chadian hostilities, bandits or guerilla-like groups and the distinct possibility of being shot at by the Chadian Army or anti-spray civilians were real concerns. The information we contractors were provided or obtained regarding such activities was often contradictory and a source of frustration and concern.

Recommendations

1. Continue to pre-position pesticides and aviation gas to meet projected treatment needs each year. Do not use previous year's aviation gas in aircraft.
2. Solicit aerial treatment bids only from experienced aerial application firms.
3. Make it a contract requirement that the contractor have someone with full contractual authority available to meet with the government's representative during normal work hours throughout the entire course of the contract. The government should assign someone full time with Contracting Officer Representative status and authority to represent the government in all project related activities.
4. Adopt the aerial application and observation guidelines used by other government agencies with similar projects. Provide a full time observation aircraft on such projects.
5. Word future USAID contracts to refer only to actual flight hours and omit the words "including refueling" in Section 3.03:(1).
6. Helicopters are vital to compensate for lack of ground access and should be used for insect survey, pre- and post-spray insect counts and for rescue work if needed.
7. Any time and as soon as a U.S. Government agency's actions, or lack of actions, begins to delay emergency programs such as this one, USAID should immediately apply all the pressure it can bring to bear to correct the situation.
8. The government should provide its contractors the information on which its conclusions are based that an area is "safe" or "unsafe." Then the contractors should be free to make their own assessment of the risks associated with going into an area.

List of Persons Contacted

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United States Government Officials/USAID Affiliated Individuals
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United States Ambassador

Bernard Wilder
Director, USAID (After July 26, 1987)

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