

LETTER TO THE EDITOR

POSSIBLE INTRODUCTION OF *Aedes albopictus* INTO TEXAS FROM VIETNAM

After rereading the articles "*Aedes albopictus* in Memphis, Tennessee (USA): an achievement of modern transportation?" by Paul Reiter and Richard F. Darsie, Jr. (Mosq. News 44:396-399, 1984) and "The discovery and distribution of *Aedes albopictus* in Harris County, Texas" by S. Sprenger and T. Wuithiranyagool (J. Am. Mosq. Control Assoc. 2:217-219, 1986), I thought knowledge gained from a personal experience might support another concept for the introduction of *Ae. albopictus* (Skuse) into the Gulf States region.

As the authors pointed out, this species is a hardy traveler and has become established in a number of locales outside its indigenous area. They also discussed its opportunities for widespread distribution, including the southeastern USA, and presented an excellent argument for invasion *via* ship/container transport. I believe the introduction of *Ae. albopictus* into the Gulf States could have begun as early as 1968.

At the request of the Command Surgeon, 7th Air Force, I was sent to Vietnam as an Armed Forces Pest Control Board Consultant in March 1968 to review rodent control programs in retrograde cargoes at the four major U.S. military aerial ports. While at Da Nang Air Base, I was briefed on salvage procedures regarding damaged helicopters.

Helicopters downed in the Da Nang area tended to fall into rice fields or other wetlands. The flight crews were removed as quickly as possible by U.S. Marines or air rescue teams in other choppers, but follow-up salvage operations were usually delayed for days or even weeks until it was safe to fly into the crash area. The recovery helicopter would hover above the downed aircraft and lower a pair of technicians. This salvage team would disconnect the rotors, collect all detached parts and place them inside the cabin with the rotors, secure the frame to keep it from breaking up during movement, then encircle it with a sling. Finally, the team would attach a lift cable to the sling and connect it to the aircraft cable hook on the belly of the recovery helicopter. The wrecked aircraft was then lifted out of the mud and water and elevated to an altitude of 100 feet above the trees. Remaining suspended at the end of the lift cable like a ball on a string, the mud-coated airframe was transported to Da Nang Air Base and deposited in an area reserved for salvage items. There the crippled helicopters re-

mained, lined up like so many brown cocoons awaiting their time for shipment.

Repair and reconstruction of the damaged helicopters was under contract with the manufacturer's rehab facility in Corpus Christi, Texas. Since it was not practicable for the contractor to maintain repair specialists and stock replacement parts within the combat zone, the damaged crafts were airlifted to Corpus Christi in Air Force cargo aircraft, rebuilt, and returned to Vietnam.

I inspected a number of the mummy-like remains. There was no aircraft wash facility in the salvaged items area so the mud packing simply dried on the frame and wherever else it had accumulated. As a matter of record, water was rationed at Da Nang Air Base at the time and it is doubtful any would have been allotted to clean damaged and unserviceable aircraft. No effort had been made to clean the shells. The cabins were cluttered with reading material, rations, and discarded military gear. Emptied soft drink containers partially filled with water were common. Seeds, grasses, and other bits of vegetation were imbedded in the soil which encased portions of each wreck. None of the window or hatch openings had been sealed to preclude entry by birds, reptiles, or rodents. The entombed pods were ideal resting sites for mosquitoes during the day.

I was told the salvaged helicopters were flown directly to Corpus Christi and off-loaded at the rehab facility. There was no mention of quarantine inspections so I assumed none was performed at the terminus. It was reported that the contractor had complained about the unsanitary conditions inside some of the damaged aircraft, but since the lack of facilities and combat priorities precluded preshipment cleanup at Da Nang Air Base the complaints were ignored. Some of the cocoons had been in the salvage area long enough to house families of rodents, and there was a story going around about a snake having exited one helicopter after it was off-loaded at Corpus Christi. Rodent infestation in cargo and in cargo aircraft had become a common complaint by aircrews in Vietnam, and infestations were traced to cargoes like those which included the untreated helicopters and light aircraft fuselages sent to the Continental United States for repair.

Obviously the crippled aircraft had to be cleaned and the layers of dried dirt sluiced away before refabrication could begin. It is probable that the eggs

of mosquitoes breeding in the rice fields and valley streams in Vietnam were washed off with the dirt and into the Corpus Christi drain system. And it is conceivable that if some of those eggs were viable, they hatched in Texas. Also, active mosquito breeding could have continued throughout the journey in the water-filled containers trapped within the wreckage.

It is suggested that this wartime period of repeated deliveries of contaminated cargo from South Vietnam to Corpus Christi, TX might have been when and how *Ae. albopictus* was introduced into the Gulf States area.

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