OVERVIEW

1966-67

"In July 1966, the Department of Defense, Advanced Research Projects Agency (ARPA) completed a study of the feasibility of developing a silent airplane as one possible means of satisfying the requirement for covert, nighttime, aerial surveillance in the Republic of Vietnam (RVN). The favorable conclusions of this study prompted the Director of Defense Research and Engineering (DDR&E) to solicit service sponsorship for the construction of an experimental low noise test vehicle. Based on the previously approved Qualitative Material Development Objective (QMDO) for a silent, portable air vehicle, the Department of Army (DA) endorsed the concept and together with other interested government agencies authorized further research. In April 1967, Lockheed Missiles and Space Company (LMSC) was awarded an ARPA contract for the construction of two experimental low noise- test vehicles to be designated the QT-2.

1967

In early September 1967, the experimental QT-2 aircraft were identified by members of the Military Assistance Command Vietnam Scientific Advisors (MACSA) staff has having the potential to satisfy an urgent requirement for covert aerial surveillance over the Demilitarized Zone (DMZ). MACSA and the Naval Research and Development Unit Vietnam (NRDU-V), in coordination with the LMSC, jointly formulated a proposal for the immediate conversion of the QT-2 into a reconnaissance airplane with limited operational capabilities. DDR&E quickly approved the program, and by late September 1967, LMSC was authorized to modify the QT-2 under the program code name PRIZE CREW.

About mid-October 1967, adverse weather conditions and an uncertain tactical situation in the northern operating area of South Vietnam led to the decision to divert the airplanes temporarily from the intended DMV reconnaissance mission. Plans were formulated for the evaluation in Military Region 4 (MR 4), RVN. At the request of MACSA, NRDU-V assisted LMSC in revising the airframe configuration of the QT-2 to

enhance its suitability for the operations envisioned in the original MACSA proposal.

1968

During February, March, and April 1968 the QT-2PC (PRIZE CREW) airplanes were jointly evaluated in MR 4 by the Army Concept Team in Vietnam (ACTIV) and NRDU-V, under the overall control of the United States Army, Vietnam (USARV). The evaluation concluded that the quiet aircraft concept proved valid---however, limiting factors were the existing night vision sensors that were available and the marginal viewing capability from the aircraft.

1969

USARV recommendations at the original two QT-2PC airplanes be retrofitted for use in conjunction with the Target Acquisition and Combat Surveillance in Vietnam (TACSIV-II) project. This was subsequently approved by the DA. DA also approved the proposed procurement of

10 additional airplanes (the QT-3, later renamed the YO-3A) for full-scale operational evaluation in the Republic of Vietnam.

1970

During the period 25 May 1970 through 25 June 1970, the DDRE directed a multi-service evaluation of the YO-3A. This was conducted at Fort Ord, California, Hunter Liggett Military Reservation (HLMR), California. This evaluation was designed to examine the capabilities and limitations of the YO-3A system in performance surveillance and fire support missions, and the aural and visual detectability of the aircraft. On 24 June 1970, YO-3A 69-18009 with a USAF crew crashed at HLMR, reducing to nine the aircraft subsequently deployed to RVN.

JULY 1970, REPUBLIC OF VIETNAM

The YO-3A detachment complete with support equipment, arrived in RVN in three increments, with the last increment closing on 3 July 1970. The six-month operational evaluation commenced officially on 4

July 1970; the first YO-3A operational mission was not flown in MR1 until 27 July 1970. At the time, a tentative evaluation termination date for the evaluation was established as 30 November 1970; later, 31 January 1971.

MARCH 1971 - 3 BLADE PROP RETROFIT

During this period from 13 July 1970 through 31 December 1970 data collection progressed as planned; however, because of the north-west monsoons which dominate MR 1 weather from November through March, and the 3-blade propeller retrofit, and follow on crew training program, the YO-3A aircraft and crews stationed in MR 1 were redeployed to MR 3. This move was completed by 6 January 1971. The propeller retrofit and the initial follow-on training were completed by 17 March 1971.

On 11 January 1971 a project status decision briefing was presented to the Deputy Commanding General, USARV, covering the program history, maintenance and organizational problems encountered, and modifications program to improve the aircraft operational performance,

a decision was made to extend the evaluation of the YO-3A through the 30 April 1971. This extension permitted the evaluation of the aircraft equipped with a three-bladed, constant-speed propeller."

The YO-3A program ended in the Republic of Vietnam, in September 1971.

Operational Evaluation of the YO-3A Quiet Aircraft
Final Report, July 1970- April 1971
Army Concept Team in Vietnam (ACTIV)
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