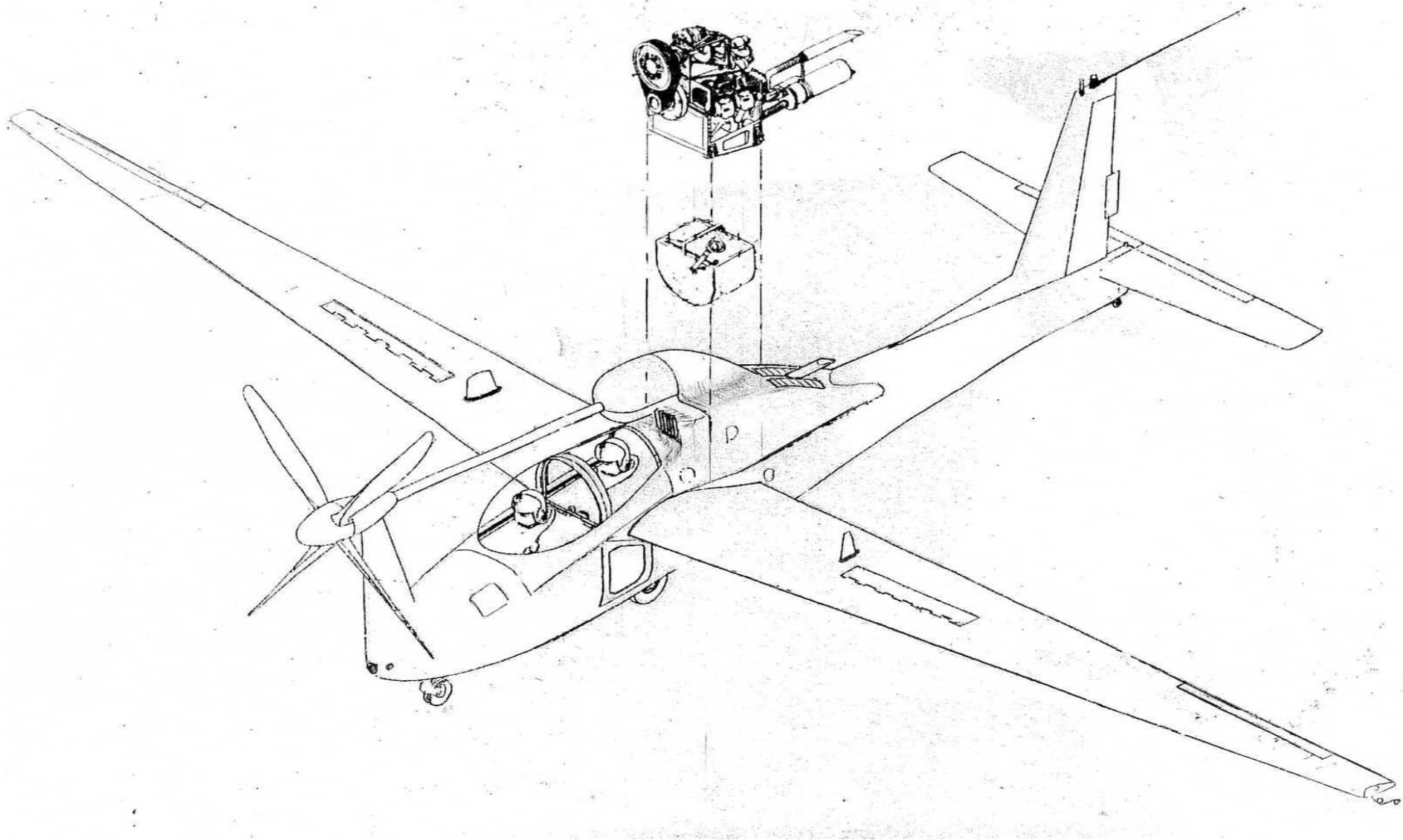


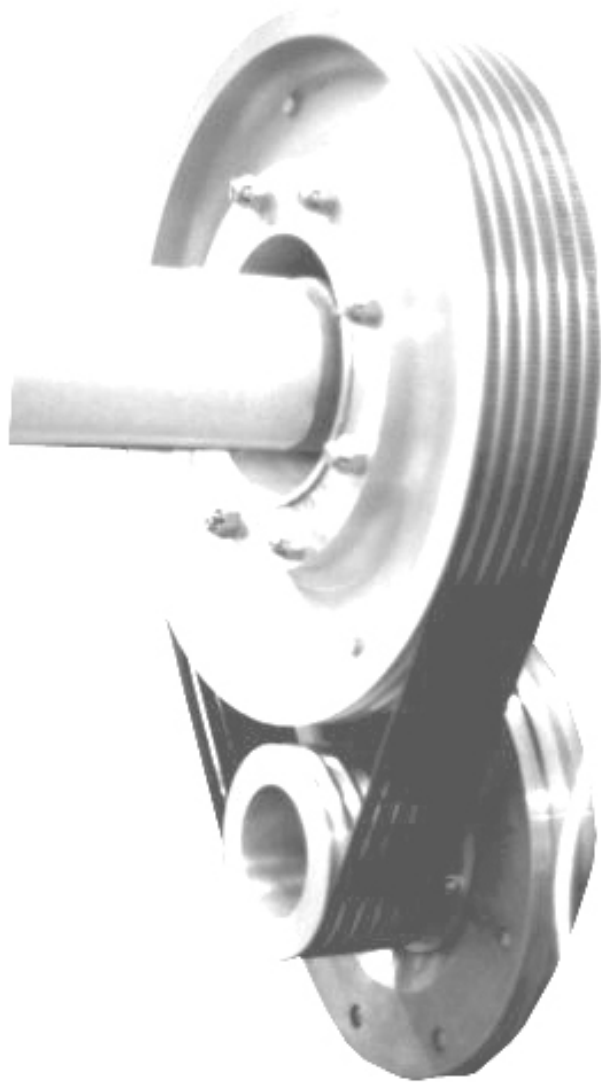
Taking The Night Away From Charlie



- SIXTH TRIENNIAL VIETNAM SYMPOSIUM
- THE VIETNAM CENTER
- TEXAS TECH UNIVERSITY



QT-2PC Aircraft



Six Sheave 3:1 V-Belt Reduction System



Starlight Scopes

“Skonk Works, North Rules

(with respect to Kelly Johnson)

- Limited Access
- Very short Chain Of Command
- Direct contact with customer.
- Minimum inspection, documentation, and reporting.
- Commercial parts and local vendors.
- Many usual DoD & Lockheed requirements waived.



Skonk-Works, North



QT-2 1st Flight - August 15, 1967

Prize Crew Operational Evaluation (OpEval) Plan

- Add IFR Instrumentation and Comm/Nav Avionics
- Add viewing ports for the Tactical Observers
- Paint the aircraft for night operations.
- Train the aircrews
- Deploy the aircraft to Vietnam within 90 days.
- Conduct nightly surveillance missions.
- Evaluate the quiet aircraft concept and, specifically the Prize Crew Aircraft, in a tactical operational environment.



Up-Loading a QT-2PC into USAF MAC C-130 at NAS Moffett Field, (“Blimp” Hanger in background)

Soc Trang Army Airfield, RVN

- 3500' Long
- 130' Wide
- Near Sea Level
- In the Mekong Delta
Near Bassac R. and
the South China Sea





Off-Loading the QT-2PC
(on its trailer) from the USAF C-130



Uncrating the QT-2PC



Crew Installing Port Wing



Preflight Checkout



Typical Hanger Work 1



Typical Hanger Work 2



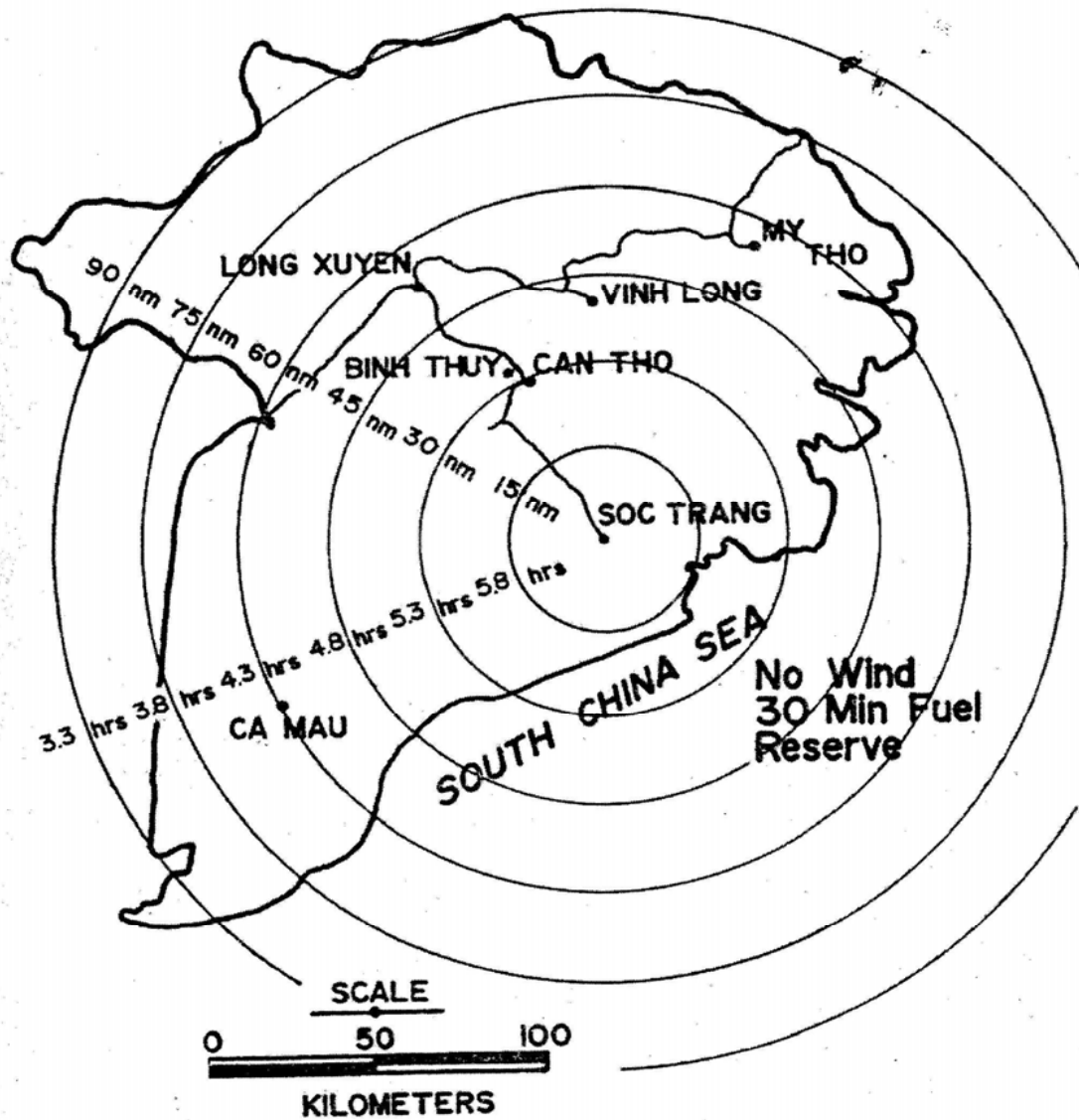
**QT-2PCs on Ramp
(STAF Tower in background)**

Prize Crew OpEval Objectives

- Determine which missions and roles can be performed by quiet aircraft and ascertain whether the results justify further development of the concept.
- Determine the capabilities and limitations of the quiet aircraft in performing those missions and roles.
- Determine the requirements to improve mission performance in a future quiet aircraft.
- The plan also included additional objectives beyond the scope of this paper: Development and identification of tactics, organizational structures, resources, and support for quiet aircraft operational deployment.

IV CORPS
RANGE/ENDURANCE

• SAIGON



QT-2PC Range/Endurance

Prize Crew Mission Planning

- Two four-hour missions per aircraft each night between sundown and sunrise and within a 70-mile radius of Soc Trang .
- Crew change at turn-around.
- On-station times approximately half of the mission time.
- Half-hour a fuel reserve allowed for unplanned events.
- Alternate Airfields:
 - 1st: Binh Thuy VNAFB
 - Tertiary: Tan Son Nhut and Binh Hoa



Prize Crew Ops Shack



Air Crew Brief/Debrief



Aircrew Ingress and Buckle-Up



Pre-Flight Check-out



Salute and Take-Off



QT-2PC in Left Turn



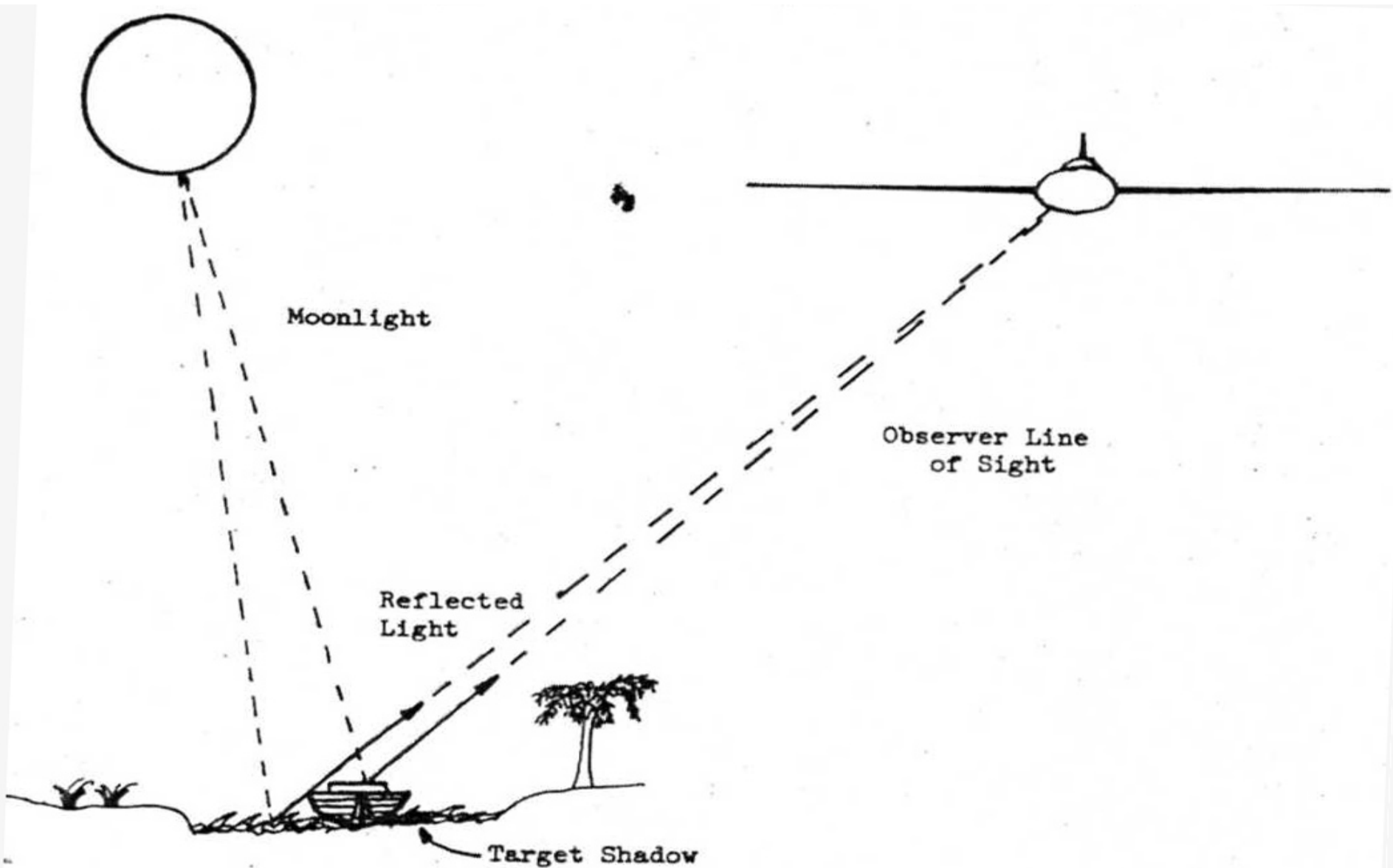
QT-2PC Landing After a Mission

Prize Crew Mission Roles

- Hot Contact, Pre- and Post- Strike intelligence.
- Linear surveillance along routes, trails, roads, tree lines and waterways
- Area and perimeter searches around bases, camps, and outposts: Defense and location of enemy attack positions:
- Support for:
 - Artillery
 - Special Forces and SEALs.
 - Riverine and Coastal Naval Forces

Prize Crew Sightings

<u>Mission</u> <u>Role</u>	<u>% Total</u> <u>Flight</u> <u>Time</u>	<u>%</u> <u>Sightings</u>	<u>Sightings/</u> <u>Flight</u> <u>Hour</u>
River/Canal	35	70	0.9
Route:	15	20	0.62
Area, Coastal, Perimeter & Strike	27.5	12.5	0.26
Enroute/ Training	22.5	---	---
Average	100	---	0.49



Optimum Moon-Target-Aircraft relationship for target viewing and minimum aircraft detectability



QT-2PC Joint Service Air Crew



QT-2PC Joint Service Ground Crew



75RR Missed Lucky Trooper