DARPA

DARPATech

2002 Symposium

Transforming Fantasy

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Sam B. Wilson

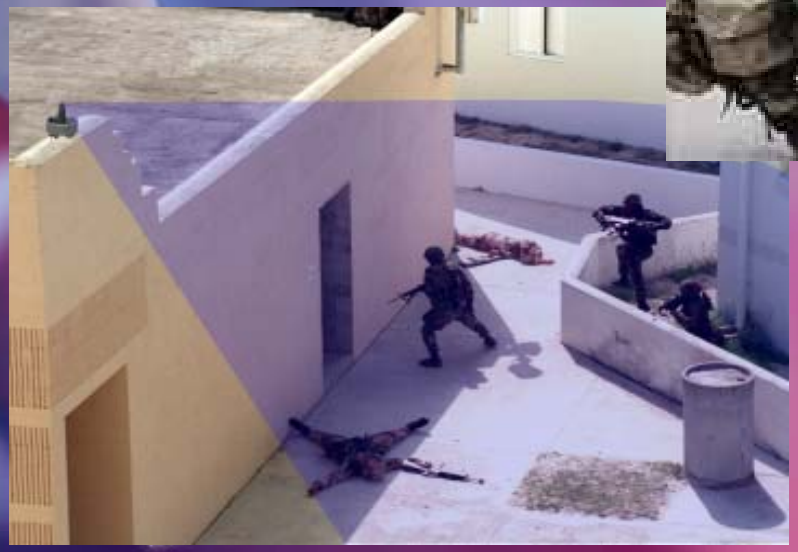
Program Manager

Transforming Fantasy

Micro Aerial Vehicle (MAV) ACTD

Sam B. Wilson III

Critical Military Need: Situational Awareness



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ACTD Operational Objective

The Problem:

- Lack of situational awareness at the small unit level places the [tactical reconnaissance and surveillance] mission and soldiers at risk.

The Solution:

- MAV technology greatly reduces the operational and tactical risks associated with small unit operations.

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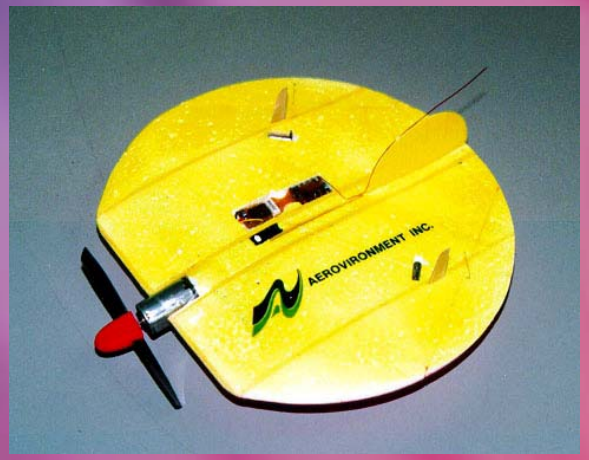
Micro Air Vehicle Project

- Micro Air Vehicle: MAV
- Private Jones



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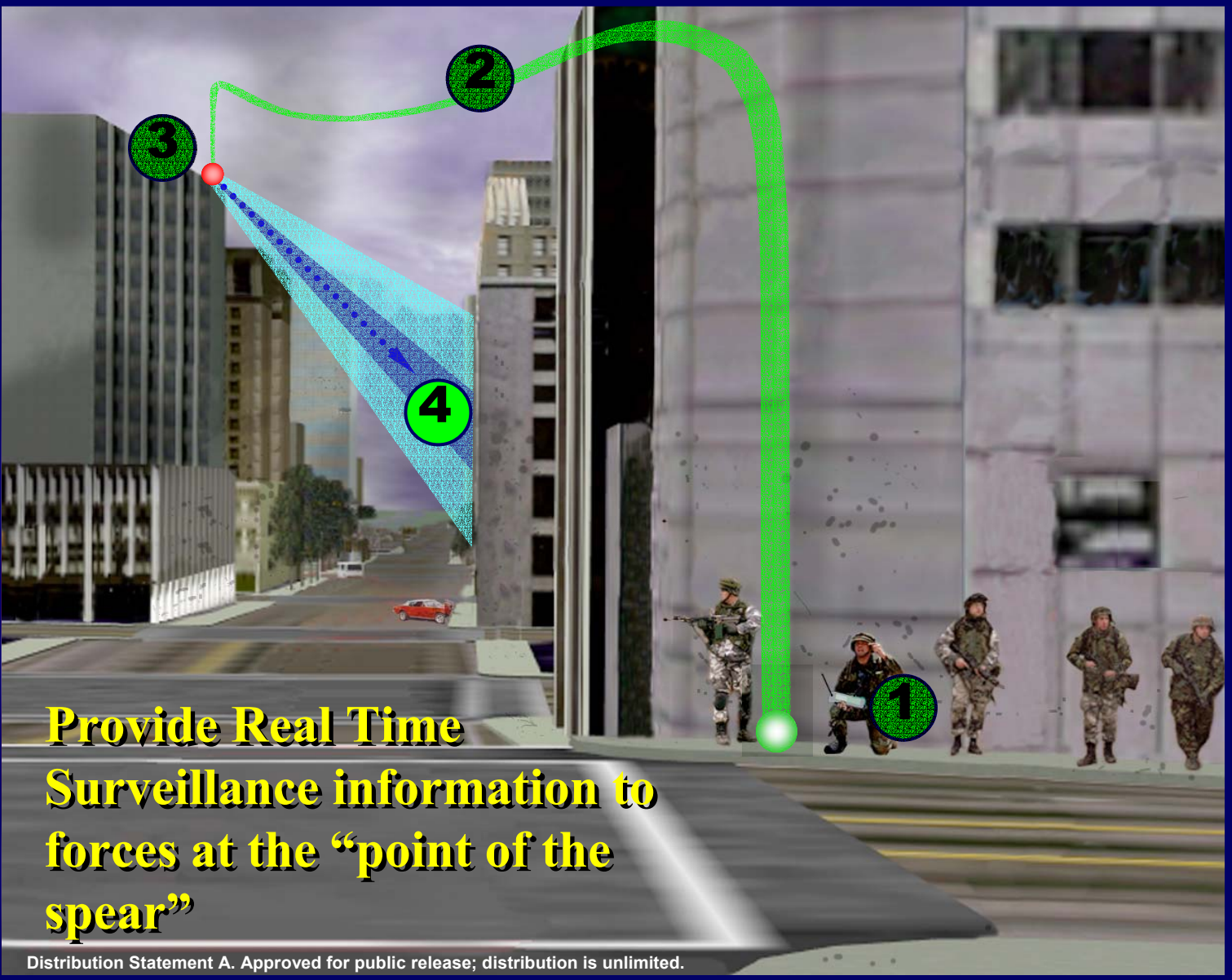
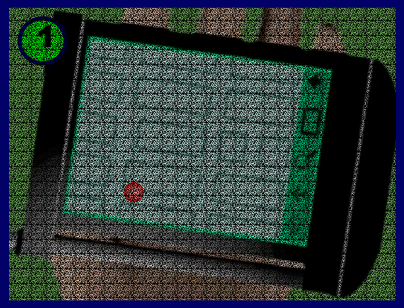
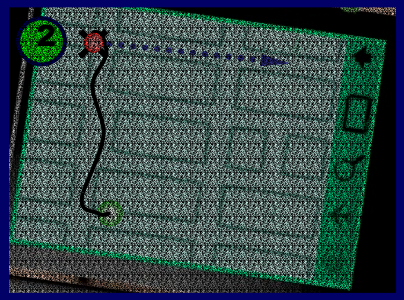
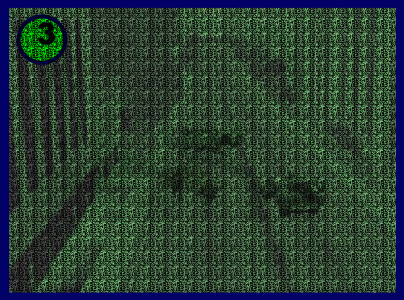
MAV Urban Environment Concept of Operations









Provide Real Time Surveillance information to forces at the "point of the spear"

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Goal: Launch & Learn

ACTD

New Paradigm:
Soldier Supervised

Autonomous Flight

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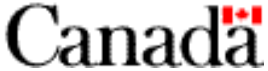
Participants and Roles



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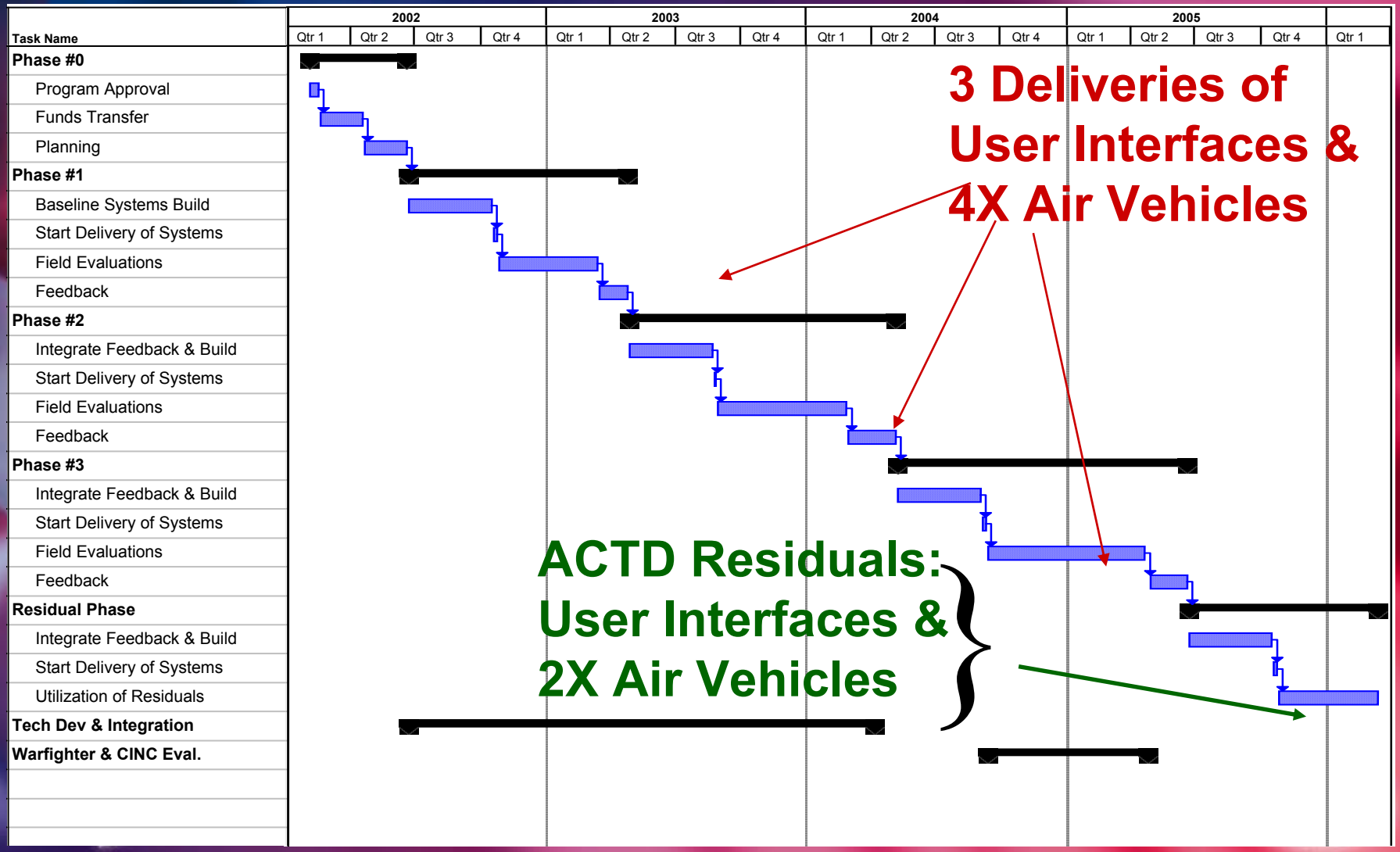
Program Schedule



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User Interface & Imagery Issues

ACTD

Goal: Launch & Learn (Autonomously)

New Paradigm:
Soldier Supervised

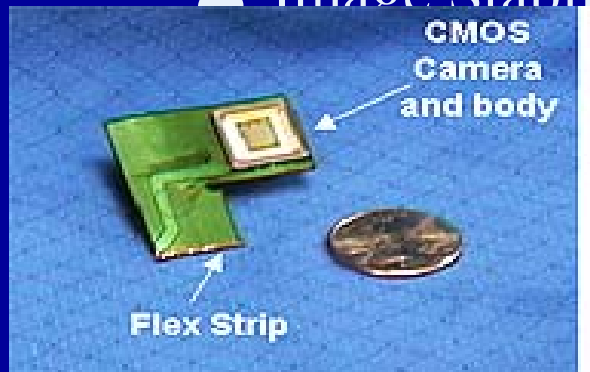
Autonomous Flight

Old Paradigm:
Pilot Required

Tele-Operation

- ☎ Closer for Clarity
- ☎ Image Stability

Analog to
Digital
Sensors



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