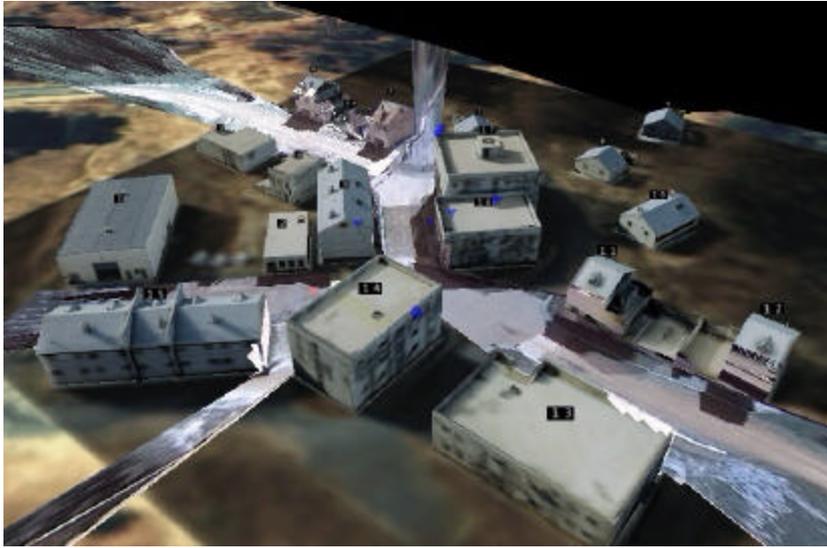


6.3 SYNTHETIC ENVIRONMENTS



TASK DESCRIPTION:

- DEVELOP A PROTOTYPE CAPABLE OF RAPID AND AUTOMATED 3D SCENE GENERATION FOR CAPTURING AND CONVERTING REAL-WORLD TERRAIN AND CULTURAL FEATURES INTO 3D IMAGES SUITABLE FOR IMMEDIATE TRAINING APPLICATION TO INCLUDE CLOSE QUARTER BATTLE (CQB) AND MILITARY OPERATIONS IN URBAN TERRAIN (MOUT)

PAYOFF:

- NEAR REAL-TIME SCENE COMMON DATABASE GENERATION CAPABILITY FOR VIRTUAL TRAINING SYSTEMS
- ADVANCE VIDEO MODELING ALGORITHMS
- AUTOMATED RECOGNITION OF TERRAIN AND CULTURAL FEATURES WITH PIXEL REDUCTION
- LIVE VIDEO INTEGRATED WITH SYNTHETIC ENV FOR AAR

TECHNICAL APPROACH:

- PERFORM CONCEPT DEFINITION
- DEVELOP AND DEMONSTRATE THE VIDEO MODELING ENGINE
- EXPLOIT OBLIQUE IMAGERY TECHNOLOGY
- DEVELOP AUTOMATED RECOGNITION OF TERRAIN AND CULTURAL FEATURES
- INTEGRATE LIVE VIDEO WITH 3D MODEL FOR AAR
- DEVELOP PROCESSES AND TOOLS FOR MAGTF COMMON DATABASE PRODUCTION
- EARLY DEVELOPMENT TESTING
- TRANSITION INTO VIRTE PROGRAM

PERFORMERS:

- CONTRACTOR: TBD
- PMTRASYS (TDA)

SCHEDULE: SYNTHETIC ENVIRONMENTS

TASKS	FY02	FY03	FY04	FY05	FY06
LIVE VIDEO DEMO & TEST		▲	▲		
SYN ENV AUTO DEMO & TEST			▲	▲	
LIVE-VIRTUAL INTEG DEMO & TEST			▲	▲	▲
COMMON DB DEMO & TEST				▲	▲
VIDEO TRACK FOR PLI DEMO & TEST				▲	▲
TRANSITION TO USERS			◇		◇

TRANSITION: CM FNC, LCPP FNC, DVTE,