



National Defense Industrial Association 27th Annual Test and Evaluation Conference Tampa, FL

T&E Instrumentation Infrastructure – Maximum Utilization of Available Resources Session

16 March 2011

**Briefed by:
Jim Schwierling
Lead Project Director, PMITTS, PEO STRI
Telephone: 256-876-3451 DSN: 746-2451
Electronic Mail: jim.schwierling@us.army.mil**



FALSE IMPRESSION CAVEAT



It should be explicitly noted that the U.S. Government makes no official commitment nor obligation to provide any additional detailed information or an agreement of sale on any of the systems or capabilities portrayed during this presentation that have not been authorized for release.



OUTLINE



- **Who We Are**
- **Mission**
- **Activities**
- **Organization**
- **Products**
- **Future Efforts**
- **Summary**

ORGANIZATION

PM ITTS

PM: COL Michael E. Zarbo
Project Manager for Instrumentation, Targets,
and Threat Simulators
ATTN: SFAE-STRI-PMITTS
12350 Research Parkway, Orlando, FL 32826-3276
(407) 384-5250 DSN 970-5250
email: michael.zarbo@us.army.mil
DPM: Mr. Jerry Sirmans
(407) 384-5251 DSN 970-5251
email: jerry.sirmans@us.army.mil

IMO

Mr. J. Russell Longenbach
Instrumentation Mgmt Office
ATTN: SFAE-STRI-PMITTS-I
12350 Research Parkway
Orlando, FL 32826-3276
(407) 384-5230 / DSN 970-5230
e-mail:
J.Russ.Longenbach@us.army.mil

TMO

Mr. Al Brown
Targets Mgmt Office
ATTN: SFAE-STRI-PMITTS-Q
Redstone Arsenal, AL 35898-7458
(256) 876-4077/7764
DSN 746-4077/7764
e-mail:
Alvin.Brown@us.army.mil

TSMO

Mr. Mark C. Tutten
Threat Systems Mgmt Office
ATTN: SFAE-STRI-PMITTS-S
Redstone Arsenal, AL 35898-
4761
(256) 876-9656 x200
DSN 746-9656 x200
email:
Mark.Tutten@us.army.mil





TMO MISSION



- **MANAGE TOTAL LIFE CYCLE OF TARGETS, OPERATIONAL THREAT VEHICLES, TARGET CONTROL SYSTEMS AND GROUND RANGE SYSTEMS USED IN LIVE AND VIRTUAL TESTING, AND TRAINING.**
- **PROVIDE BEST VALUE ACQUISITION, SUPERIOR LIFE CYCLE SUSTAINMENT AND OPERATION FOR THE U.S. ARMY, DoD, AND INTERNATIONAL CUSTOMER.**
- **EXECUTE MISSIONS AS ASSIGNED OR DIRECTED BY PEO STRI AND PM ITTS.**



PRIMARY ACTIVITIES

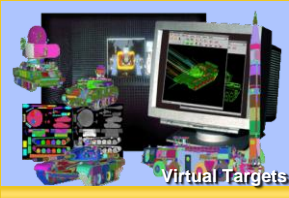


Based on Customer Target Requirements

- Aerial – Fixed and Rotary Wing
- Mobile Ground / Foreign Materiel (both conventional and unconventional)
 - Foreign Systems
 - Surrogates
- Virtual – Models and Simulations
- Precision Targetry Systems
- Auxiliary / Ancillary Equipment



MQM-107



Virtual Targets



Precision Targetry System



UAS-T



SMERCH



QUH-1



T-72



Towed Target



MSAT



BMP-2



RPVT



Technical Vehicle



WHAT WE DO



MATERIAL DEVELOPER

Develop products



Acquire Products



CUSTOMER SUPPORT



Fly



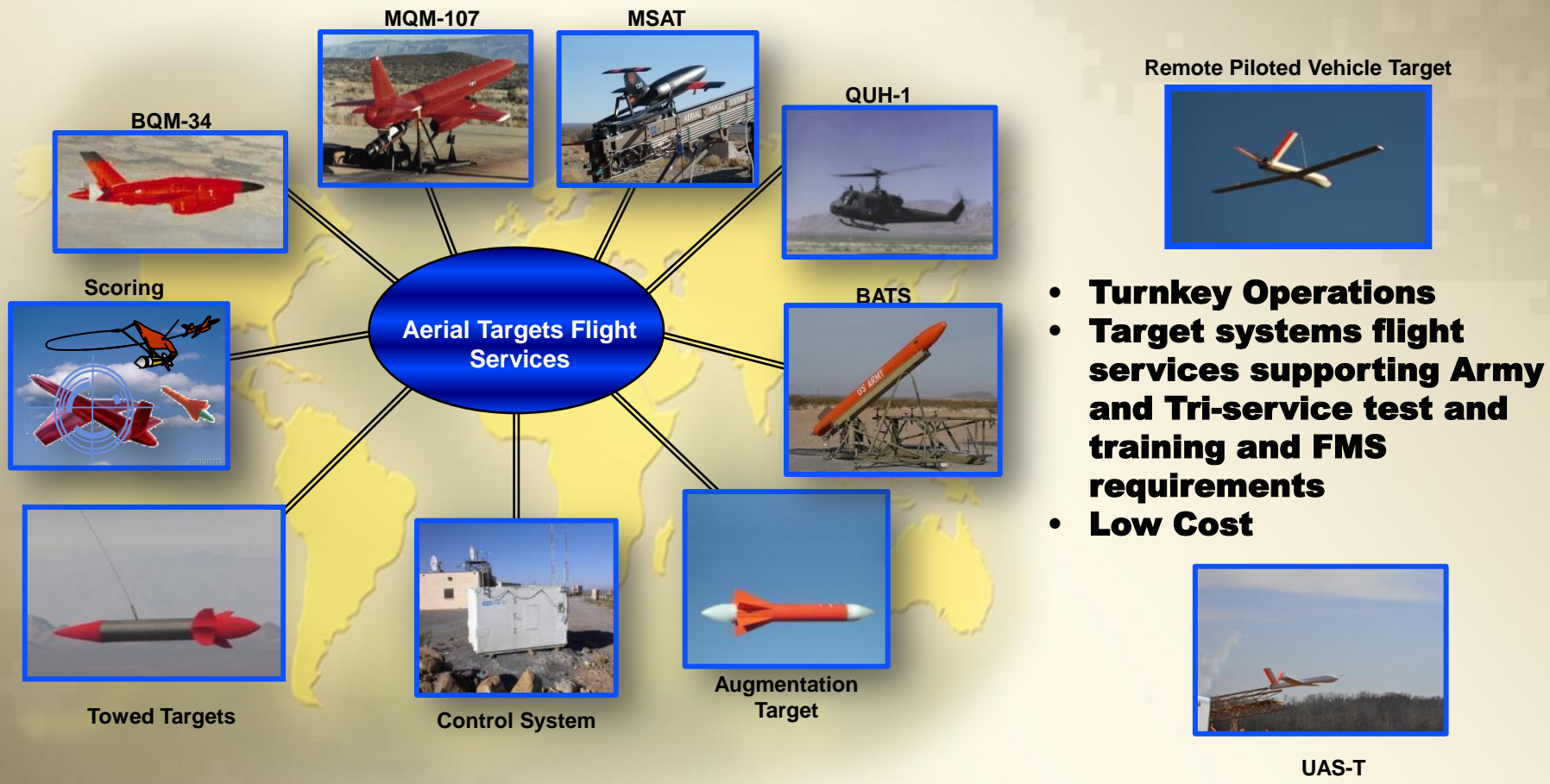
Drive



Sustain



AERIAL TARGETS



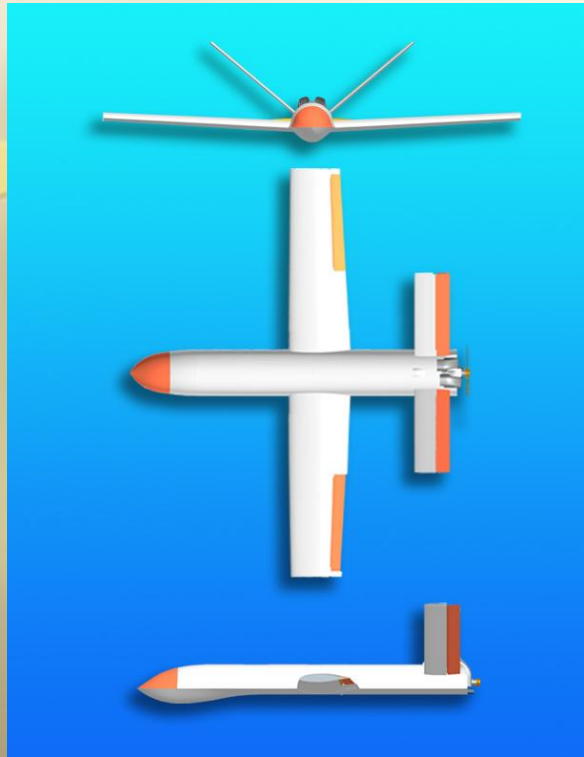
- **Turnkey Operations**
- **Target systems flight services supporting Army and Tri-service test and training and FMS requirements**
- **Low Cost**

Simulate Aerial Threats World-Wide in Live and Virtual Domains

BroadSword and Outlaw



BroadSword

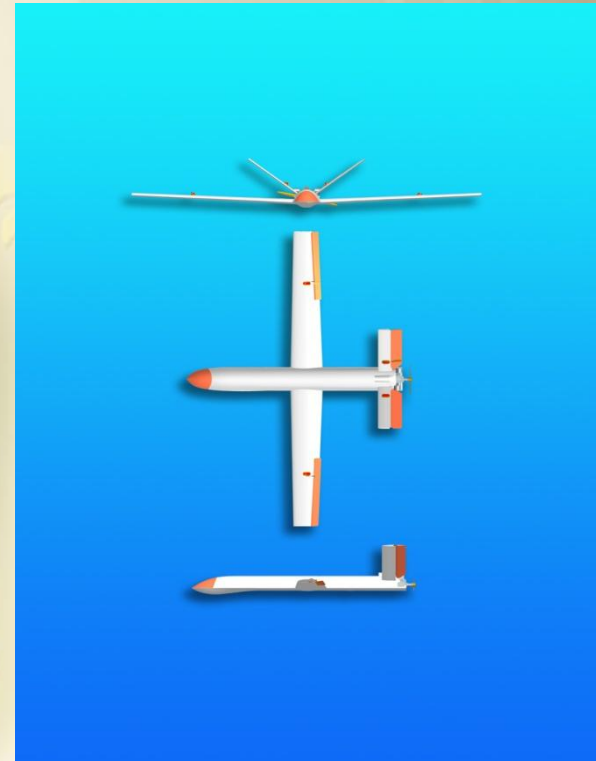


BroadSword is available in carbon fiber or fiberglass for variable radar signatures

Payload is a trade between required airspeed, altitude, and flight duration

Length.....13.7 ft (4.2 m)
Wingspan.....17.21ft (5.2 m)
Speed.....132 mph
Average Basic Weight...350 lbs
Gross Weight.....550 lbs

Outlaw



Length..... 8.4 ft (2.56 m)
Wingspan...13.6 ft (4.15 m)
Speed.....125 mph
Average Basic Weight...70 lbs
Gross Weight... 120 lbs

AERIAL TARGETS



MOBILE GROUND TARGETS



Centrally Manage and Execute:

- Over 340 assets
- Mobile Ground Targets for development and operational testing
- Multiple usage options:
 - Rent
 - Lease
 - Buy
- Provide accreditation support



■ Foreign Equipment
■ Surrogate Equipment



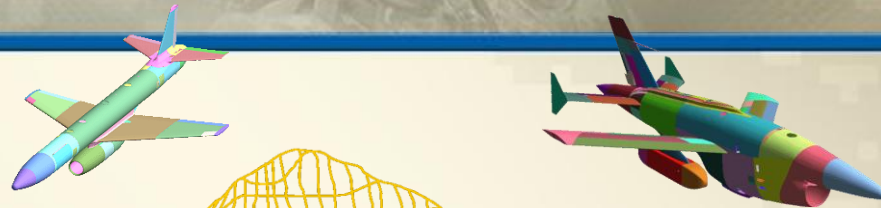
- Range Targetry
- Design
 - Procurement
 - Fielding
 - Support

Threat Representative Targets in Live and Virtual Domains

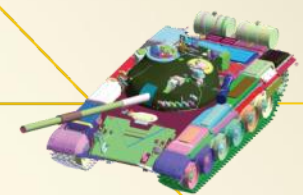
MOBILE GROUND TARGETS



VIRTUAL TARGETS



- **Virtual Targets Project:** Building simulation target models capable of being used in synthetic signature prediction analysis software programs
- **Target Generation Laboratory:** Transitioning CAD models into simulation compliant visual, infrared, and radar frequency simulation target models
- **Army Model Exchange:** Distributing simulation target models to simulation developers throughout the Army T&E community







Army Model Exchange

The screenshot shows a Windows Internet Explorer browser window displaying the Army Model Exchange website. The address bar shows the URL <https://modelexchange.army.mil/>. The page title is "Army Model Exchange". The main content area includes a navigation bar, a description of the exchange, a "Log In To The Model Exchange" button, and sections for "Army Model Exchange Managed Account" and "Army Knowledge Online (AKO) Managed Account". A large red URL <https://modelexchange.army.mil> is overlaid on the page. At the bottom, there is a "Terms of Use / Terms of Service" section and a "DEPARTMENT OF DEFENSE (DoD) COMPUTER SYSTEM" notice.

Authorized Users can Access and Download all Available Models through the Army Model Exchange



WHAT WE HAVE DEVELOPED/ PURCHASED RECENTLY



Precision Target Signature

URAL 375



T-72



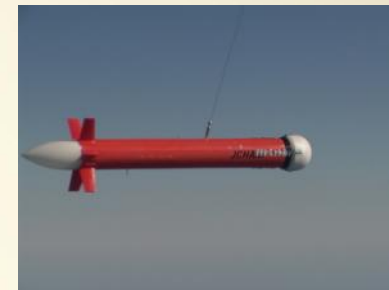
BMP-2



UAS-Ts



Virtual Targets



JCHAAT



FIVE YEAR FORECAST TO DEVELOP/PURCHASE



Medium Speed Aerial Targets

High Speed Aerial Targets

Precision Targets - Mobility



Looking at technology areas to enhance current capabilities



Fully Mission Capable Threat Targets



Technical Vehicle w/crew representation

Rotary Wing Targets



Common Control System



SUMMARY



TMO:

- ALWAYS LOOKING FOR A BETTER, FASTER, CHEAPER PRODUCT FOR OUR CUSTOMERS
- RECOGNIZED LEADER OF AERIAL AND GROUND TARGETS
- READY TO RESPONSIVELY AND RESPONSIBLY SUPPORT T&E AND SPECIAL TRAINING REQUIREMENTS

NEED INDUSTRY TO CONTINUE PROVIDING REASONABLY PRICED, STATE OF THE ART TECHNOLOGIES FOR ADAPTATION AND INCORPORATION INTO TARGETRY



PROVIDING/OPERATING AERIAL, GROUND & VIRTUAL TARGETS



AERIAL TARGETS



Target No. 7	
Alt	Speed
1	0-100
2	100-200
3	200-300
4	300-400
5	400-500
6	500-600
7	600-700

Program: Total Duration 18
Program: 8000000
Item: 001
Item: 002
Item: 003
Item: 004
Item: 005
Item: 006
Item: 007
Item: 008
Item: 009
Item: 010
Item: 011
Item: 012
Item: 013
Item: 014
Item: 015
Item: 016
Item: 017
Item: 018
Item: 019
Item: 020
Item: 021
Item: 022
Item: 023
Item: 024
Item: 025
Item: 026
Item: 027
Item: 028
Item: 029
Item: 030
Item: 031
Item: 032
Item: 033
Item: 034
Item: 035
Item: 036
Item: 037
Item: 038
Item: 039
Item: 040
Item: 041
Item: 042
Item: 043
Item: 044
Item: 045
Item: 046
Item: 047
Item: 048
Item: 049
Item: 050
Item: 051
Item: 052
Item: 053
Item: 054
Item: 055
Item: 056
Item: 057
Item: 058
Item: 059
Item: 060
Item: 061
Item: 062
Item: 063
Item: 064
Item: 065
Item: 066
Item: 067
Item: 068
Item: 069
Item: 070
Item: 071
Item: 072
Item: 073
Item: 074
Item: 075
Item: 076
Item: 077
Item: 078
Item: 079
Item: 080
Item: 081
Item: 082
Item: 083
Item: 084
Item: 085
Item: 086
Item: 087
Item: 088
Item: 089
Item: 090
Item: 091
Item: 092
Item: 093
Item: 094
Item: 095
Item: 096
Item: 097
Item: 098
Item: 099
Item: 100
Item: 101
Item: 102
Item: 103
Item: 104
Item: 105
Item: 106
Item: 107
Item: 108
Item: 109
Item: 110
Item: 111
Item: 112
Item: 113
Item: 114
Item: 115
Item: 116
Item: 117
Item: 118
Item: 119
Item: 120
Item: 121
Item: 122
Item: 123
Item: 124
Item: 125
Item: 126
Item: 127
Item: 128
Item: 129
Item: 130
Item: 131
Item: 132
Item: 133
Item: 134
Item: 135
Item: 136
Item: 137
Item: 138
Item: 139
Item: 140
Item: 141
Item: 142
Item: 143
Item: 144
Item: 145
Item: 146
Item: 147
Item: 148
Item: 149
Item: 150
Item: 151
Item: 152
Item: 153
Item: 154
Item: 155
Item: 156
Item: 157
Item: 158
Item: 159
Item: 160
Item: 161
Item: 162
Item: 163
Item: 164
Item: 165
Item: 166
Item: 167
Item: 168
Item: 169
Item: 170
Item: 171
Item: 172
Item: 173
Item: 174
Item: 175
Item: 176
Item: 177
Item: 178
Item: 179
Item: 180
Item: 181
Item: 182
Item: 183
Item: 184
Item: 185
Item: 186
Item: 187
Item: 188
Item: 189
Item: 190
Item: 191
Item: 192
Item: 193
Item: 194
Item: 195
Item: 196
Item: 197
Item: 198
Item: 199
Item: 200

VIRTUAL TARGETS

GROUND TARGETS

