Administrative Change to 480ISRWI14-101, *DCGS Analysis and Reporting Team (DART)*

OPR: 480 ISR WG/DO

References to Mission Support Analyst should be changed to Multi-Source Analyst throughout the publication.

29 November 2012
1. **Purpose.** This Wing Instruction will define the function of the Air Force Distributed Common Ground System (DCGS) Analysis and Reporting Team (DART). This Wing Instruction is meant to provide a baseline for the 480 ISR WG DARTs (i.e. It is not mandating every Group to have a Request for Information (RFI) process or to conduct Ground Moving
Target Indicator (GMTI) (as examples); however, if a group does execute an RFI process or utilizes GMTI, the Wing Instruction applies.

2. Background. The 480 ISR WG wrote this Wing Instruction in response to a need to establish baseline guidance for all the DARTs across the Wing.

3. DART Mission and Role. The DART performs tactical/operational analysis derived from organic DCGS assets to improve the quality, responsiveness, and relevance of intelligence reporting of the AF DCGS AN/GSQ-272 SENTINEL weapon system through collaborative, fused, all-source multi-sensor analysis. The DART correlates and fuses data to support DCGS crews and Supported Units (S/U) throughout every phase of DCGS operations. Additionally, it fuses DCGS-derived information with other available intelligence data from non-DCGS sources to produce higher-confidence reports and enhance both internal and external support. Two types of mission function of the DART include support to internal and external customers, as described below:

3.1. Internal Support. Internal mission crew support is defined as building situational awareness by providing current intelligence to crews and leadership (reference section six for additional information on DART products). The DART will also manage formal (e.g. intel portion of the Pre-Mission Brief [PMB]) and informal (e.g. crew questions) tasked requirements.

3.2. External Support. The DART provides external support to ensure requirements are satisfied and to obtain operations details and produce tailored products (e.g. feeding S/U’s operational planning, satisfying RFIs, etc.). Maintaining coordination with external entities serves to manage formal (e.g. RFIs) and informal (e.g. Joint Terminal Attack Controller [JTAC] request via Internet Relay Chat [mIRC]) tasked requirements in order to maximize collection, processing, and exploitation capacity.

Figure 3.1: DART Support Functions.

4. DART Tasks.

4.1. Mission Type Orders (MTOs). The Fusion Lead, internal DCGS role, (reference paragraph 4.5) will ensure S/U ISR Liaison Officers (ISRLOs) and Collection Managers understand DART’s assigned capability to satisfy MTOs and ensure the Wing Operations
Center (WOC), DCGS Liaison Officer (LNO) and ISRLOs are aware of the overall plan to support the MTO. The Fusion Lead is responsible for working with the respective Mission Planning Cell (MPC) to develop agreements with the assigned assets (for collection requirements) and sister Distributed Ground Systems (DGSs) (for Collection, Processing, Exploitation, and Dissemination [CPED] requirements) and the WOC (for allocation and apportionment).

4.2. Request for Information (RFI). S/Us send RFIs to the agency they believe can answer their request. RFIs sent to the DCGS are dealt with internally or deferred. An RFI is defined as any specific direct support request/requirement for AF-DCGS intelligence information or products to support an ongoing crisis or operation not necessarily related to standing requirements or scheduled intelligence production. The DARTs are responsible for coordinating and deconflicting with the Intelligence, Surveillance, and Reconnaissance Division (ISRD) and Joint/National agencies for their respective Area of Operations (AO) Fusion Leads. RFIs requiring long-term analysis (beyond eight days) or that which the DART is incapable of answering, will be declined or deferred to another appropriate agency and may be handled via a more formal RFI process.

4.2.1. Outside of the DCGS DART RFI Boundaries. Requests outside of the established criteria or capability will be declined or deferred. Possible appropriate organizations are listed below:

Table 4.1. : DCGS RFI Requests.

<table>
<thead>
<tr>
<th>Type of Request</th>
<th>Possible Systems/Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>New ISR Collection</td>
<td>DGS Mission, Planning and Collections Cell or applicable exploitation organization</td>
</tr>
<tr>
<td>AF DCGS ISR Coverage Inquiries</td>
<td></td>
</tr>
<tr>
<td>Political Assessments or Intelligence Preparation of the Operational Environment (IPOE) Process – Human Dimension</td>
<td>National Terrain System (HTS) National Ground Intelligence Center (NGIC)</td>
</tr>
<tr>
<td>3D Modeling</td>
<td>DGS-Alabama</td>
</tr>
<tr>
<td>IPOE</td>
<td>Multiple Organizations</td>
</tr>
<tr>
<td>Requests solely based on GMTI Analysis</td>
<td>National Air and Space Intelligence Center (NASIC)</td>
</tr>
<tr>
<td>Ground Equipment</td>
<td>NGIC</td>
</tr>
<tr>
<td>IPOE Process – Named Area of Interest (NAI) Development</td>
<td>Requesting Organization DART (Outside of the RFI system)</td>
</tr>
<tr>
<td>Surface-to-Air Fire (SAFIRE) Analysis</td>
<td>Combined Air Operations Center (CAOC) ISRD Analysis, Correlation and Fusion (ACF) Team</td>
</tr>
<tr>
<td>Order of Battle (OB) Analysis</td>
<td>Defense Intelligence Agency (DIA)</td>
</tr>
<tr>
<td>NSA Target Office of Primary Interest (TOPI) RFIs and SIGINT Characterizations</td>
<td>National Tactical Integration (NTI)</td>
</tr>
<tr>
<td>Joint Analysis Center (JAC)/Joint Intelligence Centers (JICs)</td>
<td>Order of Battle (OB) Analysis</td>
</tr>
</tbody>
</table>

4.3. Support to Crews. DARTs will provide crew support to include content for PMBs and Current Intelligence Briefings (CIBs) to the MPC and crew members. The DART can
provide operations highlight slides, Keyhole Markup Language (KML) files, and deep dive studies to crews. DARTs will support crews by providing situational awareness; both short-term (tactical) historical analysis and real-time analysis to crews during operations.

4.4. Support to Leadership. DARTs shall provide AF DCGS leadership intelligence briefings and ISR roll-ups. The DART can also provide some of the same products and support as mentioned above; again the main purpose is to provide situational awareness to leadership as well as operational issues (good and bad) and identify lessons learned.

4.5. Fusion Leads.

4.5.1. In accordance with AFTTP 3-1.DCGS and the AF DCGS PED Special Instructions (SPINS), the DART when assigned as DGS Fusion Lead, will establish and maintain ongoing relationships with S/Us, mission partners, and ISRLOs to maximize ISR capabilities to provide higher confidence reporting. DARTs will develop AO expertise to provide continuity and analysis for assigned AOs and named operations.

4.5.2. During mission execution, the DGS Fusion Lead shall coordinate with the applicable Command, Control, Communication (C3) Lead to provide baseline support. The Fusion Lead will gather current information and intelligence updates for PMBs, overlays, and reports (reference section 6) that are within current operational capability. By request, Fusion Lead sites will provide additional products to fill S/U’s desired effects (e.g. ISR Mission Summaries). Fusion Lead will tailor products for rapid consumption and integration of intelligence in order to optimally assist the existing S/U intelligence element. When tasked with an MTO, the Fusion Lead will coordinate all-source intelligence production requirements as it applies to the MTO.

4.5.3. During the post-mission debrief the DGS Fusion Lead may request feedback from the C3 Lead on mission planning effectiveness concerning Fusion Lead production and support.

5. DART interaction with Mission Planning Cell (MPC).

5.1. The DART and MPC will interact during all phases of the DCGS Operational Planning Process (DOPP). The DART shall keep the MPC informed of any RFIs/intelligence gaps that need to be satisfied. The DART should provide all-source intelligence of the operational environment to the MPC for inclusion in mission planning and the PMB. The MPC shall inform the DART of all pre-determined arrangements (e.g. ISR agreements, Cross-Cueing opportunities, etc.) for mission execution. The DART shall provide analytical support to optimize additional collection opportunities to satisfy ongoing operations. DART operators will be responsible for outreach to S/U and filter any emerging requirements to the MPC, which will assess collection possibilities and provide feedback to the DART operators.

5.2. The MPC and DART will collaboratively gather feedback from S/Us to capture lessons learned and best practices from the mission execution phase. The DART will provide feedback to the MPC on the mission planning and mission execution phases to capture lessons learned and best practices, as well as document any issues to be resolved (especially unsatisfied requirements or significant intelligence/events from the mission).
6. DART Products.

6.1. This Wing Instruction is meant to provide a baseline for the 480 ISR WG DART products (i.e. it is not mandating every Group to conduct every product listed below; however, if a group is responsible for any of the following products, the Wing Instruction applies):

6.2. Pre-Mission Briefing (PMB). The PMB prepares the crews for mission execution by providing critical mission materials. The division of labor/responsibility between the MPC and DART for the PMB may differ depending on the site. Crews will participate in the PMB; the PMB and Essential Element of Information (EEIs) are used to highlight mission collection requirements to the DCGS crews.

6.2.1. Listed below are minimum items that should be covered in a PMB:

6.2.1.1. Mission number and aircraft type.
6.2.1.2. Projected flight route/orbit, take-off/landing times/dates, and scheduled on-station/off station times.
6.2.1.3. Equipment status of primary and backup aircraft/systems.
6.2.1.4. Operation updates and Significant Activities (SIGACTS).
6.2.1.5. Theater ISR allocation and guidance.
6.2.1.6. MTO tasking and mission director guidance.
6.2.1.7. Stress the desired effects for the S/U.
6.2.1.8. Mission background.
6.2.1.9. DCGS Operational Planning Process (DOPP) slide with current track.
6.2.1.10. Destination Points (DP) sequence slide.
6.2.1.11. Review advisory support criteria.
6.2.1.12. Cross-cue platforms and opportunities/review reconnaissance operations being conducted within or near mission area.
6.2.1.13. Operator Assignments and roll call.
6.2.1.15. Pertinent Mission Control Notes (MCN)/Crew Information Files (CIFs)/Notice to Airmen (NOTAM).
6.2.1.17. Emergency evacuation procedures, including assembly areas and head counts.

6.2.2. When applicable the following items should also be included in the PMB:

6.2.2.1. Accomplish grid verification plotting prior to entering the sensitive area or immediately after posting during missions.
6.2.2.2. Tactical Operations Centers (TOCs), Joint Terminal Attack Controllers (JTAC), and repeater slides (CENTCOM Area of Responsibility [AOR]).

6.2.2.3. Electronic Attack Request Forms (EARFs) and Air Mobility Division (AMD) drop zones (CENTCOM AOR).

6.2.2.4. Theater Weather and Combat Search and Rescue (CSAR) information.

6.2.2.5. Refer to Signals Intelligence (SIGINT) governing directives such as: U.S. Signals.

6.2.2.6. Intelligence Directives (USSIDs) SP0018, SP0009, CR1251 and CR1252.

6.2.2.7. A review of technical data which may include:

   6.2.2.7.1. Open product report series by subject and entity.
   6.2.2.7.2. Order(s) of Battle (OB) updates.
   6.2.2.7.3. Specific Collection Requirements.
   6.2.2.7.4. Air defense facilities which can be anticipated to react against the reconnaissance mission.
   6.2.2.7.5. Tactics and Threat Warning (TW) criteria, requirements, and aircrew reactions.
   6.2.2.7.6. Review of recent, significant reactions to the Sensitive Reconnaissance Operation (SRO) mission aircraft or other aircraft operating within the SRO mission’s AOR.
   6.2.2.7.7. Distinct operating techniques of target communications within the SRO mission’s AOR.
   6.2.2.7.8. Recent intercepts of atypical signals, including: signal parameters, known or approximate location of the signal and the SRO mission aircraft at the time of intercept.
   6.2.2.7.9. Target intelligence update, including: ongoing/recent activity and any noted Signal Operating Instructions (SOI) recoveries.

6.3. Digital Overlays. A digital overlay (shape, KML, draw file, etc.) is a product that displays geospatial information or intelligence with DGS baseline applications. Digital overlays produced by the DART are used to graphically depict real-time intelligence data, activity, and references, while meeting S/U desired effects.

6.4. Air Force DCGS Analysis Report (AFDAR). The AFDAR is a by-request or event-triggered tailored all-source product. The AFDAR can be used to answer customer requests for fused products such as an RFI (see section 4). An AFDAR production requirement can be generated either internally or externally. AFDAR dissemination guidance is spelled out in the customer request; it will include e-mail dissemination to all relevant parties including, the requestor, DCGS players, DCGS LNO and for contingency operations, the appropriate regional command liaison officer.

6.5. All Source EYELID Report (ASER). The ASER is produced by the DART to substantiate EYELIDs into higher confidence reporting. An ASER can be an all-source
product and is designed to give ground forces situational awareness of a possible Improvised Explosive Device (IED)-related threat discovered during mission execution. SIGINT or Human Intelligence (HUMINT) will not be the sole source for IED reporting, but can be leveraged for potential cross-cue opportunity.

6.6. Quick Look. The Quick Look is a by-request, graphical representation of the Post-Mission Summary (PMS) for situational awareness. It is particularly useful when supporting a Scheme of Maneuver (SOM).

6.7. Storyboards. The storyboard is a product designed to highlight a significant event occurring during a given mission. Two standardized examples are vehicle and mission storyboards. Descriptions of these specific storyboards can be found in the AFTTP 3-1 DCGS.

6.8. Gridded Reference Graphics (GRGs). GRGs provided by the DART should meet S/U’s intent; GRGs consist of graphical representations of a fixed target area, providing a visual index of all structures in a target area.

6.9. SIGINT Tactical Analysis Report (STAR). The STAR provides a graphical portrayal of DGS collection for SIGINT missions. Descriptions of the STAR can be found in the AFTTP 3-1 DCGS.

7. Crew Positions/Roles within the DART.

7.1. Senior Correlation Analyst (SCAN). The SCAN supervises DART operations and is directly subordinate to the Mission Operations Commander (MOC) or Mission Director, as appropriate. The SCAN will assign Mission Support Analysts (MSAs) and Correlation Analysts (CANs) to support missions IAW the PED Tasking Order (PTO) and the Crew Manning Letter (CML). The SCAN will ensure all necessary and mandatory information is annotated in the pass-down binder, and ensure quality checks are performed on products and reports completed by DART analysts. The SCAN will ensure observed/detected order-of-battle updates are briefed in context to the DART crew and provided to mission crews. The SCAN or appointed delegate will attend post-mission debriefs, submit any suggestions for improvement to mission support flights (e.g. DOK, DOT, DOM, etc.) and lead changeover with incoming crew.

7.2. Correlation Analyst (CAN). The CAN, directly subordinate to the MOC or SCAN, correlates multi-INT (e.g. Geospatial Intelligence [GEOINT], Measurement and Signature Intelligence [MASINT], SIGINT, Open Source Intelligence [OSINT], etc.) data during mission operations. The CAN is the focal point for internal/external ad hoc collection taskings, aids the MOC in maintaining situational awareness and disseminates correlated intelligence to external intelligence consumers. The CAN will establish and maintain fluid communication with the MOC, Ground Mission Supervisor (GMS), Imagery Mission Supervisor (IMS), and DART personnel.

7.3. Mission Support Analyst (MSA). The MSA, subordinate to the SCAN or CAN (depending on local guidance), conducts mission specific intelligence research and tactical trend analysis in support of AF DCGS crews. The MSA shall maintain situational awareness of current AO activity. MSAs shall review applicable documents (e.g. Intelligence Summaries [INTSUMS], Daily Intelligence Summaries [DISUMS], etc.) for the previous Air Tasking Order (ATO) day, identify common enemy Tactics, Techniques, and Procedures
(TTPs), important operations, and anything else relevant for maintaining crew’s SA. MSAs shall contact respective S/U and refine requirements in order to provide the proper level of support. The MSA will fuse intelligence from other analysts, as dictated by S/U requirements, and develop an assessment. If the CAN is unavailable, the MSA shall integrate intelligence derived within the DGS or at other intelligence units to generate AFDARs and other applicable DART products.

NOTE: Operational groups can add additional crew positions as they deem necessary to satisfy S/U requirements. These positions are not official Wing positions and will be manned out of current Group assets.

8. DART Interaction with Intelligence Mission Partners (when applicable):

8.1. Air National Guard (ANG). The DART coordinates and collaborates with the DGS ANG sites, supporting them by providing Fusion products, KMLs, and mission related intelligence. The DART will coordinate using email, Internet Relay Chat (mIRC), and other means of communication. The 480 ISR WG shall include the DGS ANG sites in all Operational Synchronization (Op Syncs) Video Tele-Conferences (VTCs); ensuring that the Wing Fusion Leads pass applicable operational information to the Guard Sites.

8.2. Distributed Mission Site (DMS). The DARTs shall interact with DMS sites to pull AO or INT-specific expertise and incorporate into Fusion Lead AO knowledge. Interaction with a DMS is mission dependent and therefore may be used for situational awareness purposes. DMS-NASIC is the established entry point for leveraging technical expertise.

8.3. National Tactical Integration (NTI). The DARTs shall collaborate with NTIs to incorporate national SIGINT, receive historical data, and increase Fusion Lead AO knowledge for situational awareness. NTIs provide DARTs with intelligence from National databases that may not be provided by DMS sites. NTI can be used to further collaborate with the Air Operations Center (AOC) ISRD.

8.4. Intelligence Community (IC) (i.e. NGA, NGIC, DIA, NSA, Theater JACs/JICs, etc.) and Specialty Centers (Joint IED Defeat Organization - JIEDDO, etc.). The DARTs shall collaborate as appropriate with the IC and Specialty Centers for DART products and situational awareness.

8.5. ISR Division (ISRD-AOC). The DARTs will coordinate with the ISRD when mission operations requirements dictate, in order to maintain and provide situational awareness. The DARTs are responsible for coordination and deconfliction with the ISRD during the RFI process.
9. Other DART Capabilities (DGS-dependent).

9.1. Ground Moving Target Indicator (GMTI). GMTI will be used as an additive fusion layer of intelligence data, with the goal of enhancing SA of DGS crews in order to provide higher confidence products to the S/U. DCGS personnel will not create GMTI specific products; only add GMTI data to existing fusion products. GMTI trained analysts will utilize whatever mission tool(s) best accomplish Phase 1 GMTI exploitation and correlation objectives.

JEFFREY A. KRUSE, Colonel, USAF
Commander
Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AF DCGS Processing, Exploitation and Dissemination (PED) Special Instructions (SPINS) Version 5, 1 November 2011

AFISRAI 14-153V3- AFISRAMG4, Distributed Common Ground System (DCGS) Operations Procedures, 13 February 2012

AFTTP 3-1.DCGS, Tactical Employment Distributed Common Ground System (DCGS), 22 February 2011

Combined Force Air Component Commander (CFACC), United States Air Force-Central, Improvised Explosive Device (IED) Reporting Concept of Operations (CONOPS), 15 Jan 2011

480 ISR Wing - Commander’s Tactical Directive (CTD) 11-05, AF DCGS Phase I Ground Moving Target Indicator (GMTI) Product Standards, Supplement 1, 30 March 2012

480 ISR Wing - Commander’s Tactical Directive (CTD) 11-03, DCGS Mission Planning Handbook, 1 June 2011

561st Flash Bulletin 11-02, ISR Mission Type Order (MTO) Planning and Execution, 10 January 2011

Joint Publication 2-0, Joint Intelligence, 22 June 2007

Adopted Forms

AF Form 847, Recommendation for Change of Publication

Abbreviations and Acronyms

ACF—Analysis, Correlation and Fusion

AF—Air Force

AFDAR—Air Force DCGS Analysis Report

AF DCGS—Air Force Distributed Common Ground System

AMD—Air Mobility Division

ANG—Air National Guard

AO—Area of Operations

AOC—Air Operations Center

AOR—Area of Responsibility

ASER—All Source EYELID Report

ATO—Air Tasking Order

C3—Command, Control, Communication

CAN—Correlation Analyst
CAOC—Combined Air Operations Center
CENTCOM—Central Command
CIB—Current Intelligence Brief
CIF—Crew Information File
CML—Crew Manning Letter
CPED—Collection, Processing, Exploitation, and Dissemination
CSAR—Combat Search and Rescue
DART—DCGS Analysis and Reporting Team
DCGS—Distributed Common Ground System
DGS—Distributed Ground Station
DIA—Defense Intelligence Agency
DISUM—Daily Intelligence Summary
DMS—Distributed Mission Site
DOPP—DCGS Operational Planning Process
DP—Destination Points
EARF—Electronic Attack Request Form
EEI—Essential Elements of Information
GEOINT—Geospatial Intelligence
GMS—Ground Mission Supervisor
GMTI—Ground Moving Target Indicator
GRG—Gridded Reference Graphics
HTS—Human Terrain System
HUMINT—Human Intelligence
IED—Improvised Explosive Device
IMS—Imagery Mission Supervisor
INTSUM—Intelligence Summary
IPOE—Intelligence Preparation of the Operational Environment
ISR—Intelligence, Surveillance, and Reconnaissance
ISRD—Intelligence, Surveillance, and Reconnaissance Division
ISRLO—Intelligence, Surveillance, and Reconnaissance Liaison Officer
JAC—Joint Analysis Center
JIC—Joint Intelligence Center
JIEDDO—Joint IED Defeat Organization
JTAC—Joint Terminal Attack Controller
KML—Keyhole Markup Language File
LNO—Liaison Officer
MASINT—Measurement and Signature Intelligence
MCN—Mission Control Notes
m IRC—Internet Chat Relay
MOC—Mission Operations Commander
MPC—Mission Planning Cell
MSA—Mission Support Analyst
MTO—Mission Type Order
NAI—Named Area of Interest
NASIC—National Air and Space Intelligence Center
NGA—National Geospatial Intelligence Agency
NGIC—National Ground Intelligence Center
NOTAM—Notice to Airmen
NSA—National Security Agency
NTI—National Tactical Integration
OB—Order of Battle
OPR—Office of Primary Responsibility
OP SYNC—Operational Synchronization
OSINT—Open Source Intelligence
PED—Processing, Exploitation, and Dissemination
PMB—Pre-Mission Brief
PMS—Post-Mission Summary
PTO—PED Tasking Order
RFI—Request for Information
ROE—Rules of Engagement
SA—Situational Awareness
SAFIRE—Surface-to-Air Fire
SCAN—Senior Correlation Analyst
SOM—Scheme of Maneuver
S/U—Supported Unit
SIGACTS—Significant Activities
SIGINT—Signals Intelligence
SOI—Signal Operating Instructions
SPINS—Special Instructions
SRO—Sensitive Reconnaissance Operation
STAR—SIGINT Tactical Analysis Report
TOCs—Tactical Operations Centers
TOPI—Target Office of Primary Interest
TTPs—Tactics, Techniques, and Procedures
TW—Threat Warning
USSID—U.S. Signals Intelligence Directive
VTC—Video Tele-Conference
WOC—Wing Operations Center