

# ORSTROT WHITE PAPER

BY: MAJ WILLIAM S. MONCRIEF, FA40  
8TH ARMY DEPUTY SPACE SUPPORT OFFICER



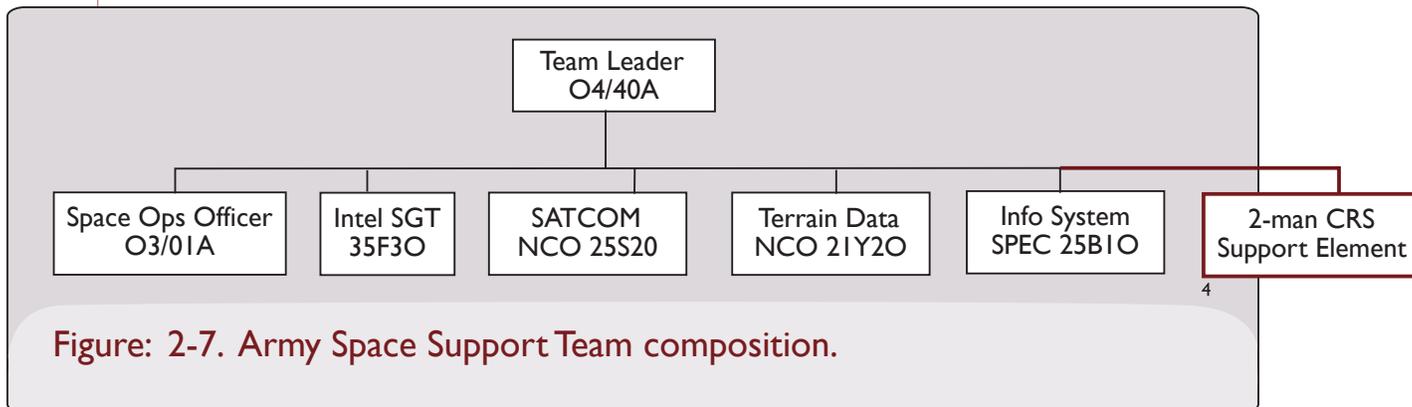
The need for Commercial Remote Sensing on the modern battlefield is unquestionable. The big question is: Who is going to provide it? As it stands now, the intelligence community is responsible for imagery support for intelligence purposes. The problem is that they can barely meet all of the National Technical Means requests they are getting now. Along with National Geospatial-intelligence Agency (NGA) being in the theater, the Army has developed and employed the Commercial Exploitation Teams which provide Commercial Remote Sensing to theater. However, this is only one part of providing Commercial Remote Sensing support to the coalition warfighters.

Providing this support to the coalition warfighters consists of more than simply supplying imagery. A major part of this support is providing training to our coalition partners on how to acquire, use and exploit it. This is undeniably an area that we have yet to fully exploit. An important step in improving our support in this area is assigning Commercial Remote Sensing support personnel to the Military Transition Team (MiTT) teams heading for Iraq and Afghanistan as well as embedding them with our coalition partners. The sooner we teach our coalition partners to be fully self-sufficient the sooner we can focus our efforts elsewhere.

Another point weighing on this issue is that the requirements for Commercial Remote Sensing support are growing by leaps and bounds. Unfortunately the primary supporter is on the chopping block for U.S. Army Space and Missile Defense Command. One reason is we do not have a Commercial Exploitation Team Program of Record to assign Soldiers against. The system the Teams are currently using, the Commercial Exploitation Team Tactical Set, does not have direct downlink capability. This system acquires its imagery through Operational Bent Pipe, but it does have archiving and production capability.<sup>1</sup> The old system the Eagle Vision II "... I is a self-contained imagery downlink and processing station that provides direct access to commercial imaging satellites. EVII receives imagery directly from the SPOT 2 and SPOT 4 satellites and the



Examples of  
Unclassified Imagery  
over Baghdad, Iraq.  
Images obtained  
from Google Earth



RADARSAT-1 synthetic aperture radar satellite. EVII is roll-on/roll-off transportable on the C-130H or C-17 aircraft.<sup>22</sup>

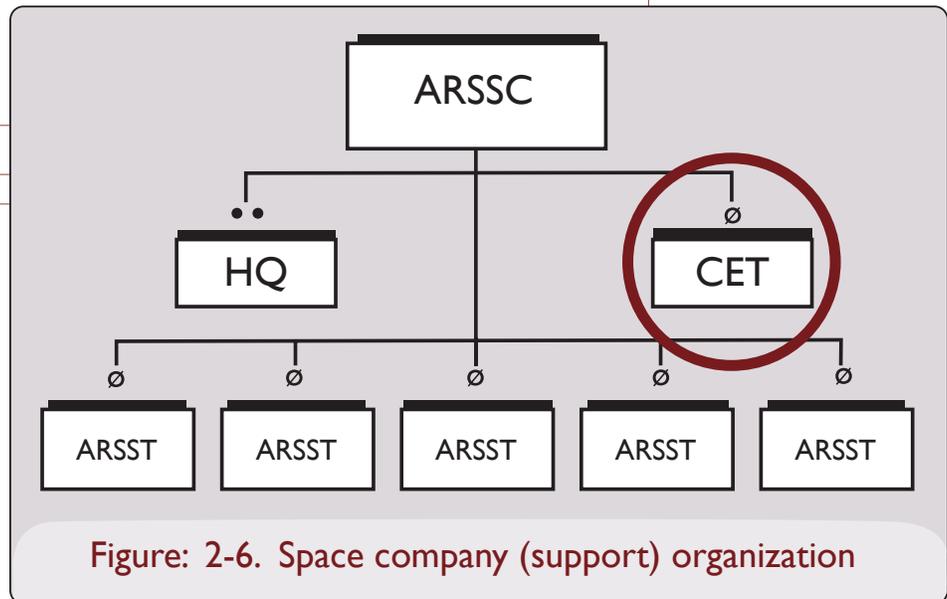
Although the current and older systems are highly effective, they were built and paid for by U.S. Army Space and Missile Defense Command and are not a part of an official Program of Record. This creates major issues with the sustainment of the systems life-cycle. This is a problem we should have solved a long time ago.

The ever increasing requirements for Commercial Remote Sensing support combined with the endangered Commercial Exploitation Teams leaves us with two options. One, the intelligence community increases its footprint in the areas of Commercial Remote Sensing products and starts embedding personnel with coalition units. Two, U.S. Army Space and Missile Defense Command and the FA40 community take over as the proponent, not sole provider, for Commercial Remote Sensing, which would include training our coalition partners in how to acquire, use and exploit it. If the FA40 community takes over this mission it does not necessarily mean all teams need special equipment or a Commercial Exploitation Team Tactical Set. Educating our coalition partners only requires a laptop, Google Earth and an unclassified Space Operations System (SOS) Workstation. We could equip the Commercial Remote Sensing support elements with the Tactical Set but it is not necessary in all locations.

With this being the case, should the Space Support Elements and Army Space Support Teams — as they are currently configured — conduct this mission?

The one major problem with the Space Support Elements and Army Space Support Teams conducting this mission is FA40s are becoming increasingly tied to work at the top secret and even Special Technical Operations (STO) levels. In some locations, we are upgrading our SOS workstations to the top secret level. This allows us to bring in other tools like Battlefield Visualization Initiative and Joint Worldwide Intelligence Communications System (JWICS) Google Earth online to give us a complete Space picture. If a two-person Space Support Element is then asked to break away from its work stations to bring in unclassified imagery products for the Iraqi, Afghan, and Republic of Korea armies, it may desynchronize their operations and disrupt their battle rhythm. In U.S. Central Command, they can hand this off to the Commercial Exploitation Team but it is not as responsive as having a man on site. With U.S. Northern Command or Korea, this is not even an option. It would be nice to have a one or two man component on the Space Support Element or Army Space Support Team whose sole mission is Commercial Remote Sensing support. This would free up the rest of the team to focus on “U.S. Only” mission requirements and would prevent the operations centers from getting a myopic view similar to the one presented in the side bar piece on page 17.

The Commercial Exploitation Teams should not go away, but they should be transformed. (See addition to figure 2-7 above) We need to ensure that we do not just look at Commercial Remote Sensing support in the scope of Commercial Exploitation Teams, but also



**Figure: 2-6. Space company (support) organization**

as support elements that encompass all forms of Commercial Remote Sensing support. This should include getting unclassified imagery, training our coalition partners and embedding with our partners at all levels. What should this new Commercial Remote Sensing support element look like? To answer this we need to answer a few other questions.

**Does this new Commercial Exploitation Team need its own system?**

Answer : Not all Commercial Exploitation Teams need a direct downlink capability. If they have an unclassified SOS Workstation, Google Earth, and U-warp they can support our coalition partners.

**Should the Commercial Exploitation Teams have the capability to request a commercial tasking?**

Answer : Yes. They can do this on a web-based system or by e-mail and phone.

**Where should the Commercial Exploitation Teams be located?**

Answer : Multiple locations. We need one main Commercial Exploitation Team with direct downlink, tasking, and production capability in each combatant command. Smaller elements would also be needed. An example of this could be, one to two FA40s who serve as Commercial Remote Sensing exploitation support on each MITT team and one to two FA40s who serve as Commercial Remote Sensing exploitation support in each Space Support Element and Army Space Support Team.

**What would each team look like?**

Answer : The main Commercial Exploitation Teams might be a little larger than the one in Bahrain; and with the same equipment due to the increased work load. The MITT team, Space Support Element, and Army Space Support Team may use the main Commercial Exploitation Team for tasking and use systems like Google Earth, and (U-warp) for day to day operations.

**Why put FA40s on MITT teams?**

Answer : If we put FA40s on the MITT teams we can teach the Iraqi and Afghan armies how to use and exploit the commercial Space assets that are out there. The sooner we get them to be fully self-sufficient the sooner we can focus our efforts elsewhere.

**Why do we need to add an extra position to the Space Support Elements?**

Answer 6: As a member of a two man Space Support Element and being the main Army Space support for the Korean peninsula, I can tell you it is needed. We work in a Republic of Korea/U.S. Combined Operations and Intelligence Center. In order to fully support the Republic we need to be able to support them with good imagery. As it stands now we cannot do that. We are also busy doing the STO planning for 8th Army and Classified Space support for 2nd Infantry Division. The additional bodies could serve as our commercial support.

**Is it not the job of the Intel community to handle imagery?**

Answer 7: Yes. However, Commercial Remote Sensing is an area we are already controlling in the U.S. Central Command Theater. I have found in most units the G-2 is glad to give the FA40 the Commercial Remote Sensing mission. In some cases the Space Support Elements have

# KEEPING BALANCE IN A JOINT ENVIRONMENT

BY: MAJ WILLIAM S. MONCRIEF,  
FA40 8TH ARMY DEPUTY  
SPACE SUPPORT OFFICER

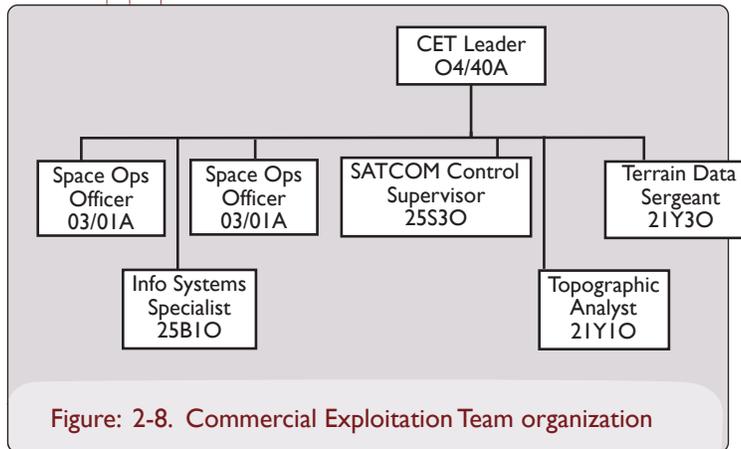


Figure: 2-8. Commercial Exploitation Team organization

been the collection manager for it. This frees up the G-2 to focus on national systems. If the Intel community wants to hold on to the complete Commercial Remote Sensing support mission, then they should give up the personnel and put a Commercial Remote Sensing Soldier on each of the MITT teams. My guess is they won't. If U.S. Army Space and Missile Defense Command can become the proponent for Commercial Remote Sensing we then do not have to run our requirements statements for a system of record through the G-2 and we write our own ticket.

**Recommendations:** U.S. Army Space and Missile Defense Command needs to petition Department of the Army to take over as the proponent for Commercial Remote Sensing. Then we should submit a critical needs statement from U.S. Central Command, U.S. Northern Command, and U.S. Pacific Command (Korea) for the need to maintain Commercial Remote Sensing support. Along with a packet to get the Commercial Exploitation Team system accredited as a system of record. We then request personnel to assign against the critical needs statements. The Space Support Elements and the Army Space Support Teams should be restructured to have one to two people designated as Commercial Remote Sensing support and give them an unclassified SOS Workstation. If there is not a fully capable Commercial Exploitation Team with direct downlink, tasking, and production capability in their theater, then we should give the Space Support Elements or Army Space Support Teams the Commercial Exploitation Team system to ensure they can fully support our coalition partners. 

1 Coffey, Bill. "RE: CET White Paper" E-mail to William S. Moncrief. 23 OCT 2008.

2 Headquarters Department of the Army. "FM 3-14.10" Space Brigade Operations, p. 2-4 & 2-5

Commercial Remote Sensing and its exploitation is a cornerstone for FA40s in the coalition environment. In Iraq, Afghanistan, and Republic of Korea, FA40s need the support of our coalition partners — Commercial Remote Sensing support is a must. Unfortunately, this is not an easy task to accomplish. With the U.S. military performing operations in multinational environments, it is becoming increasingly difficult for FA40s to share information openly because of security classification levels. The unforeseen consequences are that operations centers tend to develop a myopic view. They will either ignore our coalition partners by focusing on National Technical Means products or shy away from the use of national systems under the pretence of "security." This forces U.S. units to use only open source products thereby not fully exploiting U.S. capabilities.

Both scenarios are equally dangerous. Anyone who has served in one of these operations centers would concur. What they wouldn't say is that this is a sign of laziness or fear — although that is a correct statement. I have actually been on the operations floor and wanted to pass "U.S. Only" information to the Battle Major when he made it known he did not want to hear it if he could not share it with the Republic Of Korea military. This could be seen as him being afraid that he might accidentally disclose something to them. This is not only short-sighted but it is dangerous. As a result, he made a military operational decision based upon incomplete information. We are all professionals and should know how to handle classified information in mixed environments. If not, we should be doing another job. 