

Clean Hunter 2001: RADARSAT in a TMD War Game

Clean Hunter is the name of a huge, annual, multinational, military exercise that has provided the armed forces of NATO member states, including Canada, with an opportunity to practise "Theater Missile Defense" (TMD) operations. It is said to be the "largest live-fly exercise in Europe"¹ and "the largest and best exercise of its type in the world."²

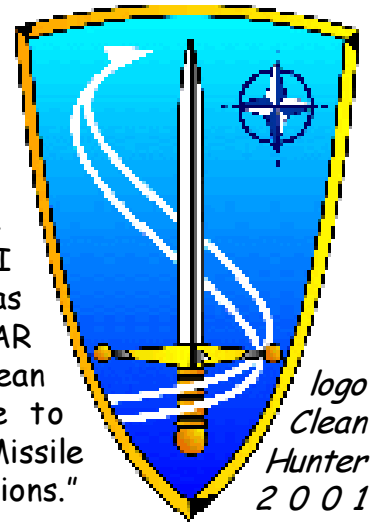
Clean Hunter was formerly called Central Enterprise. It was described by Dr. J. David Martin, the U.S. Ballistic Missile Defense Organization's Deputy Head of Strategic Relations, as:

"encompassing air and theatre missile defence. A key objective was to make the Theater Air Missile Defense mission a part of normal operations in central Europe."³



Dr. J.D. Martin

Since June of 2001, Canada has helped NATO warfighters to prepare for the day when RADARSAT-2 will be ready for use to protect battle-deployed troops and weapons. This unique Canadian space-based SAR/GMTI sensor is the only satellite that has been groomed through the CAESAR project—and war games like Clean Hunter 2001—to contribute to NATO's goal of making Theater Missile Defense "a part of normal operations."



Central Enterprise 1998 provided "support for Theatre Missile Defence Conventional Counter-Force (CCF) capability" and also "validated the ability of GMTI [Ground Moving Target Indicator] sensors to support the TMD CCF role."⁴ (See pp. 16-17) It was, in fact, one of the key "exercises that led up to the initiation of the CAESAR project."⁵ (See pp. 19-23.)

After CAESAR was created, it used Clean Hunter as an opportunity to pursue NATO's desire to increase the "interoperability" of its warfighters, their operational procedures and the use of SAR/GMTI technologies in TMD operations. Canada's collaboration in this effort was of historic significance.

Dr. Chuck Perkins, the U.S. Act-

TMD: Coming to a Theatre of War Near You?

Theater Missile Defense (TMD) has a starring role in Ballistic Missile Defense (BMD). In fact, TMD is the performance of "missile defense" weapons in their *most important role*. TMD will soon be used in wars, to destroy missiles that threaten allied troops and weapons systems that have been deployed far from home.

TMD is not only a part of BMD, it is at the forefront of this whole weapons program. In very real terms, TMD is the "top priority" of the U.S. warplanners that are preparing to use BMD. (See Gen. Horner's statement, p. 25.)

In the U.S., TMD is overseen by the Missile Defense Agency, just as previously it was part of the BMD Organization and before that, the Strategic Defense Initiative Organization.

To many, "missile defense" is seen as an impossible futuristic, sci-fi "shield" to protect entire "homeland" populations. So called National Missile Defense (NMD) is supposed to defend Americans from missile attacks launched by terrorists or "rogue states," like

Iran, Syria and North Korea.

This preposterously unattainable vision of defending America from missile attack was first popularised by President Ronald "Star Wars" Reagan, although the enemy of the day—dubbed the "Evil Empire"—was then the USSR. Reagan, and many since, focused people's attention on the space-based weapons that were, and still are, only one small part of the NMD dream.

The idea that "missile defense" weapons are for defending civilian populations, is really just a clever pretext; a shield-like ploy protecting the project's real but covert, offensive function. NMD is a big lie used by warplanners to garner much-needed and widespread support for the most expensive weapons creation program in world history. Can you think of a better way to get public approval for an offensive arms program than to say that the weapons are needed for homeland defense?

So, if creating a protective shield for the American people, or their friends and allies in Canada, is just a fanciful

scam designed to deceive, what is this project really all about? Is it all just a cynical ploy to create a cash cow to pour hundreds of billions of dollars into weapons-producing industries? Although it *has* functioned very well at that economic task, it also has a more sinister underlying use for warfighters.

To understand the role of this weapons program, one must examine the cutting edge of "missile defense" known as TMD. Its weapons and sensor systems have been tested in simulations, military exercises and real wars.

Yes, TMD *is* coming to a theatre of war, but it will not likely be anywhere near you, unless you are in the Middle East or Central Asia, close to the strategic oil reserves that the U.S. and NATO nations call their own.

TMD is *the* "missile defense" system to watch, not only because it will literally *defend missiles*, but because when used in those faraway wars of the near future, it will be seen on home-entertainment systems near you, during the nightly wash of TV news.

ing Deputy Under-Secretary of Defense for Advanced Systems and Concepts, noted that Canadian technology played a key role in Clean Hunter 2001. He explained that the use of RADARSAT in that war game represented the

“first use of [a] Space-Based MTI [Moving Target Indicator] sensor (Canada) in a NATO exercise.”⁶

He also said Clean Hunter 2001 was the “first use of coalition interoperability CONOPS [Operational Concepts] for GMTI and SAR [Synthetic Aperture Radar] assets and Ground Station[s] in a tactical TMD exercise.”⁷

More detailed evidence regarding the use of RADARSAT in this “missile defense” testing/training exercise can be found in a technical paper by David Taylor of the NATO Consultation, Command and Control Agency (NC3A). In a table called “Distribution of CAESAR AGS [Airborne Ground Surveillance] simulations and exploitation workstations for Clean Hunter 2001,” we learn that only four countries (Canada, France, the UK and U.S.) had SAR/GMTI sensors to contribute. The table lists Canada’s RADARSAT-2 as a “Spaced Based Radar GMTI.”⁸

Taylor’s paper describes how computer-simulated target data was used during Clean Hunter 2001 to pre-

pare CAESAR participants for future “missile defense” operations. He says “it was necessary to simulate the TMD portion [of Clean Hunter 2001] because there were no live assets scheduled. The simulated CAESAR assets fulfilled this function during the exercise.”⁹

He explains that CAESAR’s TMD portion of Clean Hunter 2001 used simulated signals from seven different advanced sensor assets, including RADARSAT-2. All of these cutting-edge Intelligence, Surveillance, Reconnaissance devices cited by Taylor use SAR and GMTI technology:

“The full complement of [the] Coalition Aerial Surveillance and Reconnaissance (CAESAR) project was present at Clean Hunter 2001, including sensor simulations representing ASTOR (UK), CRESO (IT [Italy]), Global Hawk (U.S.), HORIZON (FR [France]), Joint STARS (U.S.), *RADARSAT II (CA [Canada])*, and U2 (U.S.).” (Emphasis added).¹⁰

Taylor goes on to say that these “various CAESAR sensor simulations were used to generate target detections for use by the exploitation workstations in support of a Joint Theatre Missile Defence Cell, which was responsible for produc-

ing targets for allocated ground attack assets.”¹¹

So, although Canada’s RADARSAT-2 will not be launched until December 2006, NATO warfighters have been readying themselves for its eventual use in TMD missions since as early as June 2001, when this war game took place.

Through the CAESAR project and specifically through military exercises like Clean Hunter 2001, the armed forces of a select group of NATO countries have practised for the day when data from Canada’s RADARSAT-2 would be available to them for use in TMD operations during real battles. Canada’s special role in planning for this “missile defense” warfare of the future has included providing a unique space-based technology, and preparing our armed forces—and those of our closest allies—to use that technology. The technology in question, RADARSAT-2, will be the most advanced commercial satellite ever built and the “the world’s first space based radar with GMTI capabilities.”¹²

Canada’s RADARSAT-2 was *the one and only* satellite being groomed for TMD use during the Clean Hunter 2001. In fact, during the whole CAESAR project, RADARSAT-1 and -2 were the only space-based sensors being integrated into NATO’s war plans. Canada’s RADARSAT is, therefore, a unique and vital contribution to NATO’s general warfighting ambitions, and more particularly, to its goal of making TMD “a part of normal operations.”

However, when New Democratic Party and Bloc Québécois MPs have pointedly questioned Canadian government and corporate representatives about the potential role of RADARSAT-2 in future “missile defense” operations, the response has always been immediate, emphatic and dismissive: There is, they say, no possible role for RADARSAT in “missile defense”!

Such responses are predicated on the mistaken belief that because RADARSAT-2 cannot track missiles in flight, it will have no part whatsoever in “missile defense.”

However, a major lesson to be learned from studying the CAESAR project is that RADARSAT-2 *does*, in fact, have a role in “missile defense.”

“I am pleased that Congress and the Department of Defense *Bottom-up Review have prioritized our development and fielding of BMD [Ballistic Missile Defense] systems. *We all agree Theater Missile Defense is the top priority.*”**

General Charles A. Horner, USAF

- commander-in-chief, NORAD Command
- commander, Air Force Space Command
- commander-in-chief, U.S. Space Command

Source: Statement to the Senate Armed Services Committee, as amended by the Joint Staff, Office of the Secretary of Defense and the National Security Council, April 20, 1994. <www.fas.org/spp/starwars/congress/1994_h/s940420h.htm>

*** The Bottom-Up Review:** The U.S. Department of Defense laid out a three-fold missile-defense program. It gave top priority to Theater Missile Defense (TMD). Three projects constituted the core of TMD:

- (1) improvements to the Army’s Patriot missile system,
- (2) modification of the Navy’s AEGIS system to make it capable of intercepting theater ballistic missiles, and
- (3) a new Army missile defense system called Theater High Altitude Area Defense.

Source: “Ballistic Missile Defense: A Brief History,” by the Historian’s Office, Missile Defense Agency. <www.mda.mil/mdalink/html/briefhis.html>



RADARSAT-2's role is *not* to detect missiles in flight but rather to track and target vehicular ground movements that are characteristic of ballistic-missile launch preparations. (See pp.14-18.)

RADARSAT-2 is highly-coveted for use in "missile defense" operations because of its state-of-the-art GMTI technology. For years, CAESAR's TMD exercises demonstrated that warfighters from NATO states can work together using diverse sensors, including RADARSAT-2, to detect the telltale movements of missile-launch vehicles, called Transporter-Erector-Launchers (TEL):

"TEL batteries have to follow an intricate sequence of movements (transload site, hide, fire, hide, reload, fire, hide, transload/overnight). Supply units must move at prescribed times to specific sites and headquarter units relocate as part of operational security. Key objectives of the [Clean Hunter 2001] exercises were the location and attack of TBM [Theater Ballistic Missile] infrastructure targets: Transload, Forward Operating Locations, Forward Operating Bases and Headquarter sites. The simulation of

these facilities was represented with stationary vehicles that could be imaged with the various SAR sensors."¹³

In other words, the idea is to process the data from RADARSAT-2 to determine where missiles might *possibly* be launched from. NATO's plan is to use SAR/GMTI data from Canada's RADARSAT-2 to help locate po-

FIRST STRIKE!

Government and corporate representatives vehemently dismiss the possibility that RADARSAT-2 could be used in future "missile defense" operations. However, CAESAR's TMD exercises during Clean Hunter 2001 prepared NATO warfighters to use RADARSAT-2 data to target *possible* enemy missile-launch sites for destruction in preemptive, first strike attacks.

tential missile-launch sites. This target data will then be relayed to weapons systems, like air-, sea- or ground-based ballistic missiles operated by the U.S. or allied military forces. Those weapons would then use the data from sensor systems like Canada's RADARSAT-2, in pre-emptive first-strike at-

tacks to destroy what might possibly be the enemy's missile-launch sites. As Taylor explains, the

"objective of the TMD segment of Clean Hunter [2001] was to provide a realistic Tactical Ballistic Missile (TBM) threat. The Exercise mission was to protect NATO forces from TBM attack through CCF [Conventional Counter-Force] operations...to ensure that threat TBM infrastructure and support systems could be *destroyed prior to TBM launch*."¹⁴ (Emphasis added.)

References

1. Ray Nelson, "ABL Team Participating in NATO Clean Hunter Exercise," *Space & Missile Defense Report*, June 8, 2000. www.accessmylibrary.com/coms2/summary_0286-619327_ITM
2. Clean Hunter www.globalsecurity.org/military/ops/clean-hunter.htm
3. David Martin, "The Imperative of Interoperability," *Missile Systems, Global Defence Review*, 1999. www.global-defence.com/1999/missiles/missile5.htm
4. Sherri Flemming, Peter Lenk & Joseph Ross, "NATO Theatre Missile Defence and Alliance Ground Surveillance System for Exercise Central Enterprise 1998," NC3A Technical Note 743, Oct. 1999, cited in Joseph Ross, "The CAESAR Approach to Enhancing the Interoperability of Coalition Ground Surveillance Systems," 2002 Command & Control Research Technology Symposium (CCRTS), Office of the Assistant Secretary of Defense, USA. www.dodccrp.org/events/2002/CCRTS_Monterey/Tracks/pdf/083.PDF
5. Ibid.
6. Dr. Chuck Perkins, "Advanced Concept Technology Demonstrations Success Stories," Briefing to 2001 ACTD Managers' Conference, Sept. 6, 2001. www.acq.osd.mil/actd/01mgrcnf/postconf/briefs/D1-Perki.ppt
7. Ibid.
8. David F. Taylor, "NC3A Simulation Support for NATO Exercise Clean Hunter 2001." 2002 CCRTS. dodccrp.org/events/2002/CCRTS_Monterey/Tracks/pdf/088.PDF
9. Ibid.
10. Ibid.
11. Ibid.
12. DRDC, Annual Report 1998-99. dsp-psd.pwgsc.gc.ca/Collection/D1-14-1999E.pdf
13. Taylor, op. cit.
14. Ibid.



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Would you
be willing to
serve in the
military and
possibly go into
zones of conflict
and war?

**If not, why are you
willing to pay for it?**

Canada supports the rights of conscientious objectors (COs) to not serve in the military.

In the modern world, it is our money that goes to war and military through taxation. COs think of this as "fiscal conscription."

If you would like more information about the movement to allow Canadians to redirect their military taxes to peaceful purposes, please contact us.

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