

EX VIGILANT SHIELD 15

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The 86 Airfield Systems and Utilities (ASU) Flight deployed members of the Aircraft Arrestor Systems (AAS) section from 05-21 October to CFB Goose Bay to install Mobile Aircraft Arrestor Systems (MAAS) and train 5 Wing SERCO contractors to operate the equipment in support of Ex VIGILANT SHIELD 15. Ex VIGILANT SHIELD is a bi-national exercise whose goal is to support each respective country's national strategy for the defence of North America via an integrated Canadian and American administered program. The support of 86 ASU was requested due to the participation of CF-188 Hornet aircraft and the fact that 86 ASU's mandate is to support the RCAF via deployed equipment and Military Engineers.



86 ASU techs install the KM stake-line used to anchor the MAAS during aircraft engagements

Colloquially termed the “Hornet Hookers”, 86 ASU AAS techs deploy every time a CF-188 must utilize an airfield without an existing aircraft arrestor system. The safety factor provided by additional arrestor cables is often necessary to ensure the safeguarding of military members and equipment. There are two scenarios whereby a NATO tail hook equipped aircraft would require engaging the arrestor cable. The first scenario would occur if the aircraft malfunctioned on take-off and the pilot would need to abort the procedure. The second would occur if the aircraft experienced a mid-flight emergency and had to land immediately. Either scenario would result in the aircraft being safely arrested at speeds up to 180 knots.

However, as most new AAS techs learn, arresting the aircraft is the easy part of the job. The planning, organization, deployment, and installation of the equipment is often the challenge as the 86 ASU AAS section often deploys its equipment anywhere in Canada or the United States in support of airfield operations. When tasked to install the equipment, there are two ways of

providing Mobile Aircraft Arrestor Systems (MAAS) to a known or unfamiliar airfield. The first is known as an expedient installation. This type of installation consists of placing the MAAS trailers up to 25' from the runway edge and staking them to the ground with 10x 48" body stakes and 25x 48" for each of the two trailers (for bidirectional Ops). This type of installation is used when installing the equipment on a military aerodrome as placing non-frangible objects close to the runway is in violation of multiple Transport Canada regulations. The second type of installation is known as a full installation and necessitates the use of 2x Mobile Runway Edge Sheaves (MRES) to distance the MAAS units up to 200' from the runway edge. Each MRES is installed with 32x 48" stakes and 6 Manta Ray anchors (devices similar to miniature boat anchors that are driven 12' into the ground) and each MAAS is installed with 26x stakes.



5 Wing Goose Bay SERCO contractors view the finished product and prepare for handover

Every installation is directed by a MAAS Team Leader (TL) Sgt that is qualified and certified by the Air Division to conduct the task and is responsible for all aspects of the installation and certification. TLs hold the authority to validate new installations and only do so when they are confident the equipment can safely arrest Canadian or allied aircraft. In order to qualify Refrigeration and Mechanical Systems technicians, 86 ASU administers yearly MAAS courses, to fill the role as TLs and supplement the ranks of the limited personnel who hold the qualification in the country.



86 ASU Flt installs MAAS to arrest CF-18s, such as this example during a recent Op CONNECTION airshow.

Ex VIGILANT SHIELD 15 was no different than many of the other exercises and operations that 86 ASU supports. The twist during this particular exercise was that the Unit had less than 1 month to plan, prepare equipment, deploy and execute this task as the Unit's involvement had not been confirmed until the very last minute. Regardless, the AAS sect was able to complete two full installations and certify them with aircraft from 425 Squadron prior to the deadlines imposed by the Air Division despite the austere conditions on the airfield and regular sorties conducted by civilian aircraft on the Goose Bay aerodrome.

CHIMO!

86 Airfield Systems and Utilities (ASU) Flt is a component of 8 Wing CE Sqn and is a heavy mechanical Engineer unit with unique engineering capabilities predominantly in the areas of Aircraft Arresting Systems and large power generation systems, as well as maintenance of environmental abilities.