



Strategic Aeromedical Evacuation in the Canadian Armed Forces - Indications and Outcomes

**Lieutenant Colonel Aaron Minkley
Head – Medical Standards and Policy
Canadian Forces Health Services
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Outline

- Numbers
 - Airframes
 - Indications
 - Outcomes
- The Canadian Forces (CF) are required to provide Aeromedical Evacuation (AE) support to military operations nationally and internationally.
 - In response to multiple and diverse operations, CFHS trains Aeromedical Evacuation Crew Members for a variety of airframes.



CC-144 CHALLENGER – 1982 & 2002



- 35/50 past 5 years
- 4/7 critical care
- Canada has 4 (3 AE capable)

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CC-150 POLARIS - 1992



- 6/50 past 5 years
- 2/7 critical care

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CC-130H HERCULES - 1960

- 1/50 past 5 years
- 1/7 critical care



- 3/50 past 5 years
- 0/7 critical care

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CC-130J HERCULES - 2010



CC-177 GLOBEMASTER III - 2007

- 2/50 past 5 years
- 0/7 critical care

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Civilian Contracts Both Domestic and International



- 3/50 past 5 years
- 0/7 critical care

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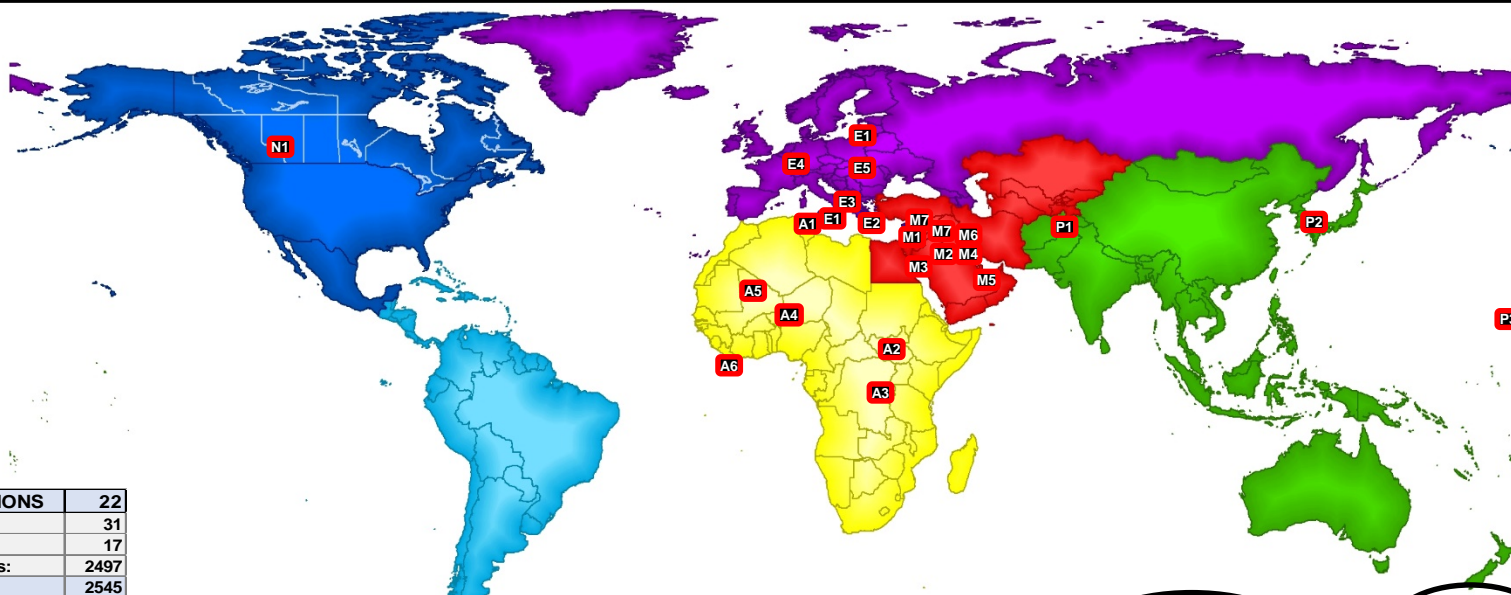


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Canadian Armed Forces Operations

N North America **L** Latin America & Caribbean **A** Africa **M** Middle East **E** Europe **P** Indo-Asia Pac



TOTAL MISSIONS	22
Support Ops:	31
Continental Ops:	17
Expeditionary Ops:	2497
Total Deployed:	2545

Rogers Pass (17) Op PALACI N1	DR Congo (8) Op CROCODILE/MONUSCO A3	Jerusalem (21) Op PROTEUS M1	Bahrain (30) Op ARTEMIS M5	Europe (683) MTF (238) / eFP (445) Op REASSURANCE E1	Ukraine (190) Op UNIFIER E5
	Niger (3) Op NABERIUS A4	Middle East (4) Op JADE/UNTSO M2	Bahrain/Qatar (18) Op FOUNDATION M6	Cyprus (1) Op SNOWGOOSE/UNFICYP E2	Afghanistan (19) Op ADDENDA P1
Tunisia (10) Op EDIFICE A1	Mali (323) Op PRESENCE A5	Sinai (67) Op CALUMET/MFO M3	Middle East (697) Op IMPACT M7	Kosovo (5) Op KOBOLD/KFOR E3	Korea/Japan (16) UNC/UNIMAC P2
South Sudan (9) Op SOPRANO/UNMISS A2	Africa (86) Op PROJECTION KIN (42) / SHA (44) A6	Kuwait (11) OSH SWA M4		Germany (4) OS Hub HQ (3) & ILEA (1) E4	Indo-Asia Pacific (293) Op PROJECTION / ARTEMIS REG (239) / AST (54) P3

25 Feb 19

UNCLASSIFIED

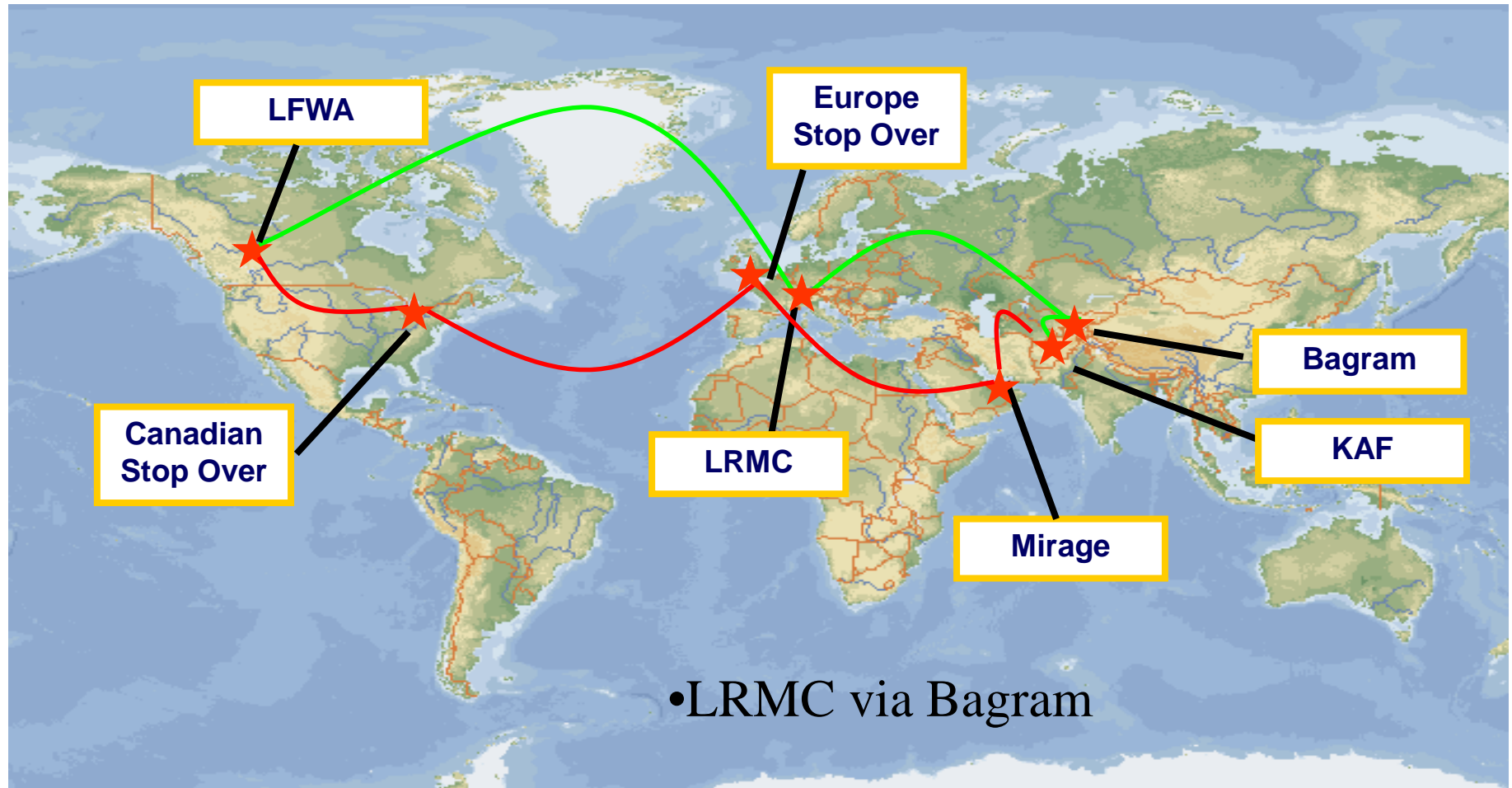
Canadian Joint Operations Command

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We often pair with Allies to accomplish the mission

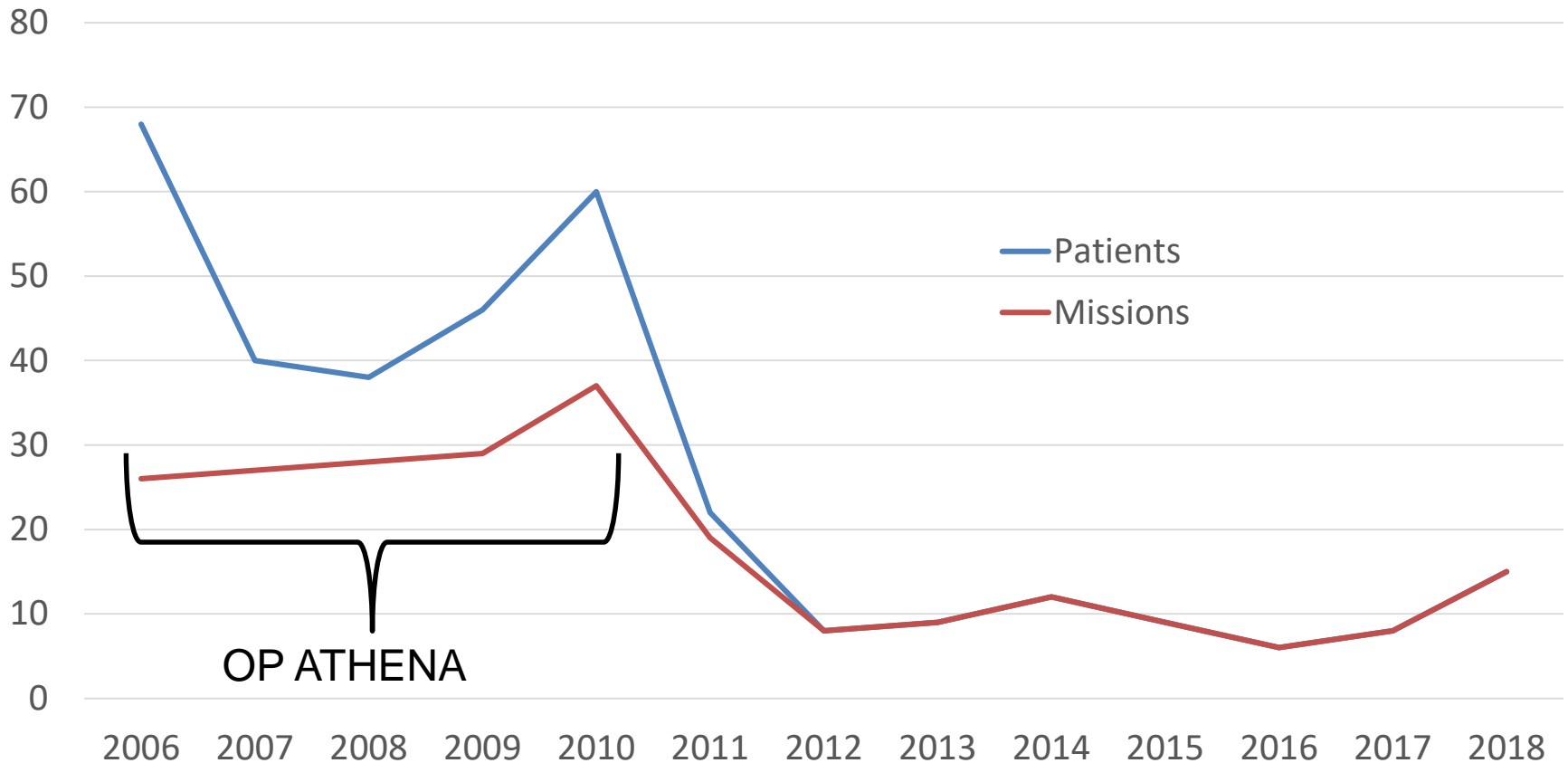


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Different Deployments / Different Challenges

Patient Transfers by Year

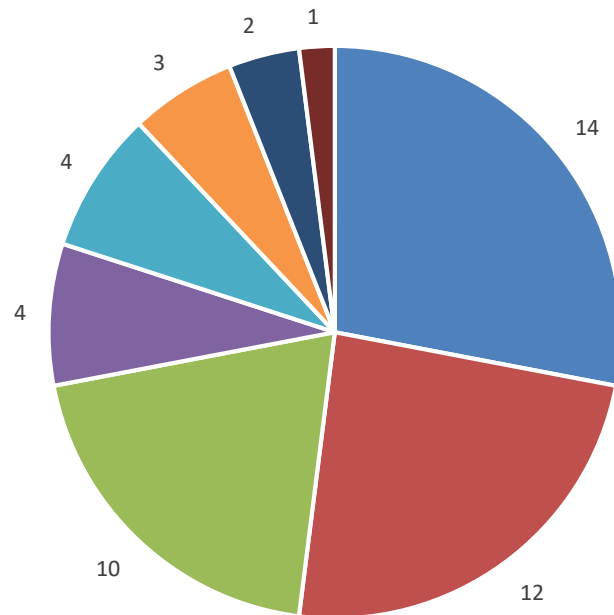


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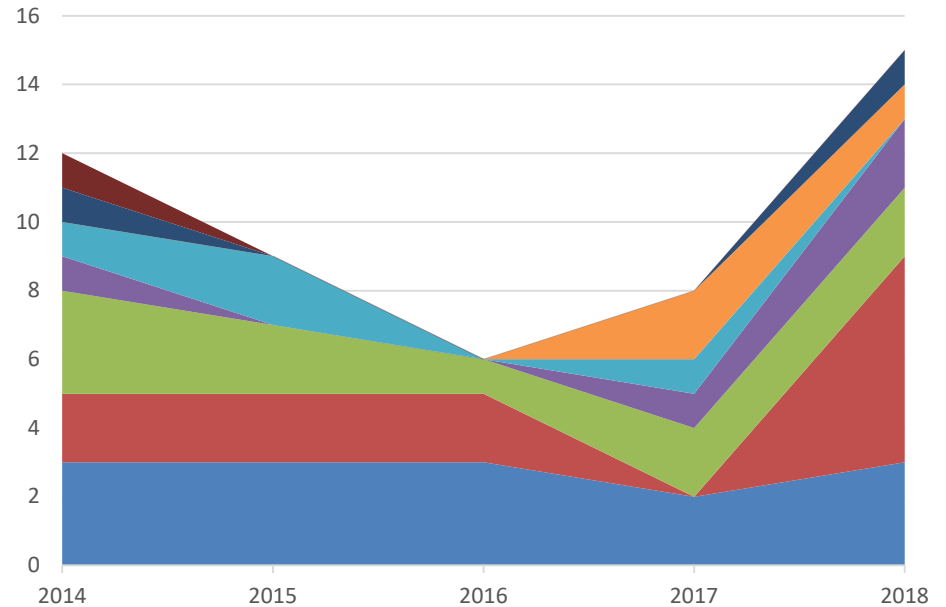


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Indications



by Year



- Medical
- Trauma (Service)
- Trauma (non-service)
- Infection
- Psych
- Cancer
- Unknown
- Gyne

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Further Information - Medical

- Medical
 - 7 Cardiovascular
 - Myocarditis
 - STEMI
 - 2 Spont pneumothorax
 - 2 Intra-cranial hemorrhage (subdural)
 - 1 LOC (Malarone)
- Infectious
 - 3 Strategic
 - Sepsis – Middle East
 - Hemoptysis, Nec Fasc
 - 1 Domestic for Meningitis
- Cancer
 - 2 Strategic (Brain);
 - 1 Domestic for palliative
- Mental Health
 - 3 Domestic
 - 1 Strategic
- Gyne (ruptured ectopic)

Red font = critical care team



Further Information - Trauma

- Service (4)
 - 2 Firearm (1X CC from LRMC)
 - 2 Fractures
- Service - Training (8)
 - 3 vehicle roll-over
 - 3 parachute (1X CC High Voltage Wire)
 - 2 Lower limb #
- Non-service (10)
 - 4 EtOH involved
 - 6 Fall from height (2 with EtOH) (1X CC fall 100ft)
 - 1 MVC
 - 1 Herniated disc

Red font = critical care team



Outcomes

- Category
 - Pri 1: 2 (both domestic – launched <24h)
 - Pri 2: 21 (median launch 2d)
 - Pri 3: 27 (median launch 8d)
- Mission
 - 16 Domestic (median launch 6d)
 - 34 International (median launch 6d)
- Adverse Events
 - Sepsis (CC150) - Sig hypotension (67/33 during take-off)
 - Herniated Disc (CC144) – neurogenic bladder during flight
 - Ischemic Toe (CC 144) – Anemia (6.7) – BKA



Outcomes – Employment Status

- Long term Outcome
 - 12 Fit full duties
 - 7 Employment Limitations
 - 19 Medical Release
 - 12 too early / unknown
- Commander Confidence
- Annual Rates
 - 2 MEDEVAC : 1000 Deployed
 - 5 Medical Repatriation : 1000 Deployed



Partnerships

- Paired with USAF on 6 cases (all from Middle East)
 - 2X gunshot wounds
 - 3X medical
 - 1X psychosis
- Only problem was transferring through Qatar
- PN Role 1/2 in Mali (Recent German AE)
- Civilian Partners (3 missions)
 - Did not bring pRBC (hGB 7.0)
 - RT unable to travel into Africa

Questions

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