



BNH Value Proposition to 🇨🇦 Canadian Armed Forces

Canadian Armed Forces (CAF) are under continuous pressure to transform, optimize & modernize training to meet increasing demands with limited resources, while preserving training effectiveness – i.e., continually improve training efficiency. To achieve this goal, CAF follows a systematic approach to analyze, design, develop, implement and evaluate training. Approach and resulting documentation are outlined in Canadian Forces Individual Training & Education System (CFITES). Although these processes are highly effective, (a) significant amount of time/effort is needed to collect/analyze the data, & to generate various control documents; and (b) data is not fully leveraged – for example shedding light on critical issues such as training gaps, duplication, and overtraining; budget, personnel and resource requirements/allocation; cost drivers and bottlenecks. Moreover, preserving the integrity of control documents is highly challenging as missions, systems, jobs, tasks, pubs, etc., change, since (a) the underlying data needed to generate various documents are not stored in a centralized database; (b) multiple groups/individuals from DND and industry are involved in various processes; and (c) no simple means are available to identify and communicate the potential impact of a change to all relevant individuals. As a result, training effectiveness and efficiency are being continually eroded with time.

BNH leverages ADVISOR Enterprise to simplify and speed Training Needs Analysis (TNA) & Training Media Analysis (TMA), and generate CFITES compliant control documents. Moreover, ADVISOR drives training efficiency by aligning current and future training activities to operational requirements to identify gaps, duplications and training with minimal value. In addition, ADVISOR preserves control documents integrity over time by continually assessing the impact of changes to missions, systems, jobs, tasks, policies, etc., on training activities/content; as well as budget, personnel and resource requirements. Training gaps, duplications and unwarranted training; budget, personnel and resource requirements for any time period; cost drivers; and bottlenecks – are quickly and concisely communicated through dashboards to all team members; along with actions to drive training effectiveness and efficiency.

BNH/ADVISOR Added Value

ADVISOR cuts time
needed to conduct TNAs
from 18 months to 6
months.

Jeffrey Hogan
Lead TNA Analyst,
USfalcon

Simplify & Speed TNA/TMA & JTAR/QS/TP/QSP Generation

- ✓ Collect data using custom-built Excel spreadsheets and upload to ADVISOR in few mouse clicks. Exchange data with other systems through xml.
- ✓ Identify and Prioritize Training Requirements of each Task based on Difficulty, Importance and Frequency (DIF); and presents reasoning behind recommendations.
- ✓ Minimize media analyses effort without compromising integrity, by grouping Teaching Points with similar characteristics based on Bloom's Taxonomy and analyzing as a single entity.

- ✓ Quickly identify viable delivery options for each Teaching Point by mapping instructional requirements to the capability of each media. Reasons for eliminating or reducing rating of a delivery option are automatically presented.
- ✓ Store the hourly rates of various types of developers, instructors and support staff; per diem and travel costs; start-up and operating costs of equipment, simulators, facilities, etc., in Templates to quickly forecast/compare budget, personnel and resources requirements of viable delivery options over training program life cycle.
- ✓ Compile/Analyze performance data to zero-in on the root cause of a deficiency and identify viable solutions (including training, job aids, policies, tools, etc.) that can yield the desired level of productivity.
- ✓ Generate Job Task Analysis Reports (JTAR), Qualification Standards (QS), Training Plans (TPs), Qualification Standard and Plan (QSP), as well as dozens of other reports with a few mouse clicks.

Maintaining tasks, objectives, KSAs, teaching points & costs in a single, web enabled, easy to access database is highly beneficial.

Major David Gerard
Manager Air Technical
Training Renewal, DND

Facilitate Collaboration & Reusability

- ✓ Store all data in a centralized database accessible anytime and from anywhere by all team members – including primes, sub-contractors and SMEs – with only a Browser. Limit access through privileges.
- ✓ Track changes made by each team member.
- ✓ Quickly find and copy Missions, Systems, Jobs, Tasks, Objectives and so forth through a smart predictive search engine function.
- ✓ Minimize duplication further through Fuzzy Logic that identifies and presents similar knowledge and skills to users for action.
- ✓ Generate audit trail with one click to track where each requirement has been addressed and identify potential gaps.

With ADVISOR we can quickly and accurately forecast training costs, communicate results & manage requirements as project scope changes.

Jeff Reynolds
Manager Global Sales &
Technical Training,
Intermec Technology

Simplify Personnel/Resource Management

- ✓ Compile data from all course analyses to identify training activities for any time period/location – including # of trainees, target audience, frequency, length and method/media.
- ✓ Forecast the number and type of personnel/resources needed for any time period/location based on course length, # of trainees, # trainees per class, method/media and staff/equipment/facility requirements.
- ✓ Compute the daily utilization rates of available personnel/resources to identify excess capabilities and bottlenecks.
- ✓ Forecast budget requirement for any time period/location based on course length, # of trainees, # trainees per class, method/media, and personnel/resource requirements.

Identified 275 hours of common training between 4 technicians.

Canadian Air Force ATTR

Reduced Credit Training from 15 months to 12 months.

US Department of Treasury

Identified \$49.3 million in potential savings over 10 years.

Canadian Army LVC TS

Maintain Training Effectiveness & Efficiency

- ✓ Preserve training programs integrity, effectiveness, efficiency and relevance as requirements evolve through a digital twin model. The model assesses the impact of changes to throughput, missions, systems, jobs, publications, etc., on training content/activities, and personnel/resource requirements.
- ✓ Maintain training efficiency by identifying training gaps, duplications and unwarranted training.
- ✓ Uncover cost drivers - i.e., where budget and resources are allocated.
- ✓ Improve resource allocation. – i.e., track the daily utilization rates of personnel/resources to identify excess capabilities and bottlenecks.
- ✓ Identify courses/activities/lessons/teaching points that can leverage training technology to improve effectiveness, increase throughput, and reduce costs, time to competency and time away from job.
- ✓ Identify cause of performance deficiencies and potential solutions.
- ✓ Continually assess venues to drive training efficiency. Budget, personnel/resource requirements for any time period; cost drivers; bottlenecks and deficiencies are quickly/concisely communicated through dashboards. Trends along with actions that drive training effectiveness and efficiency are also highlighted.

ADVISOR “... to determine the most effective and efficient media for a given situation.”

CFITES Vol. 4

ADVISOR ... “the preferred decision support tool”.

UK MoD JSP 822

Retain Ownership of Data

- ✓ Keep track of courses, activities, lessons and teaching points – including when and where they are offered and why (i.e., how they support operational requirements); as well as budget, personnel and resource requirements for each. In other words, in addition to having access to all underlying data at your fingertips, the impact of any change to missions, systems, jobs, tasks, policies, technologies, throughput, and so forth, can be easily assessed.
- ✓ Gain deep insight into specific areas. For example, courses/activities required by each job to attain the desired level of competency; time/cost required for each course/activity/competency; bottlenecks of personnel/resources, as well as their direct and indirect impact – i.e., the cascading effect of delays. In other words, gain access to data needed to optimize career progression (i.e., pipeline management). For example, the optimal throughput for each course/activity based on current capacity.
- ✓ Minimize rework and duplication by easily exchanging digital data with contractors/primes.

Proven Track Record BNH has 30+ year experience with various military organizations including the Canadian Armed Forces. Samples below. More details: <http://www.bnhexpertsoft.com/our-clients/>.

Project	Client
ADVISOR Enterprise	DND Assistant Deputy Minister (Materiel)
ADVISOR Enterprise	Royal Canadian Navy
Future Pilot Training (FPT)	Royal Canadian Air Force
Airworthiness Training Needs Assessment	Royal Canadian Air Force
Aircrew Technical Training Renewal (ATTR)	Royal Canadian Air Force
Operational System Training Provider (OTSP)	CAE / Royal Canadian Air Force
Tactical Airlift (C130J)	Lockheed Martin / Royal Canadian Air Force
Maritime Helicopter (CH148)	Sikorsky Aircraft / Royal Canadian Air Force
Arctic Offshore Patrol Ship (AOPS)	Lockheed Martin / Royal Canadian Navy
Polar Icebreaker (PIB)	SNC Lavalin / Canadian Coast Guard
Army Land Vehicle Crew Training (LVC)	Royal Canadian Army
Joint Strike Fighter (JSF)	Lockheed Martin / US Air Force
Military Flying Training System (MFTS)	Lockheed Martin / UK Royal Air Force
Defence Training Review (DTR)	Raytheon / UK Ministry of Defence
Basic Wing Course (BWC)	Lockheed Martin / Republic of Singapore
King Stallion (CH-53K),	Sikorsky Aircraft / US Marine Corps
Blackhawk (H-60)	Sikorsky Aircraft / US Army
Poseidon (P-8)	Boeing / US Naval Air Systems Command

Certifications

	<p>Controlled Goods Certification BNH is Controlled Goods Certified, which allows our organization to examine, possess or transfer controlled goods within Canada.</p>
	<p>ISO 9001: 2015 BNH Software and Training Services are ISO 9001:2015 certified. Consistently provides products/services that meet customer and applicable statutory/regulatory requirements; continually enhance customer satisfaction.</p>
	<p>Cyber Essentials BNH is Cyber Essential Certified. In demonstrating compliance with the standard, BNH proved that its security controls address cybersecurity effectively and mitigate risk from internet-based threats.</p>
	<p>Canadian Industrial Security Directorate (CISD) - Facility Security Clearance Secret Level BNH has Facility Security Clearance (FSC) Secret Level. BNH eligible to access classified and protected information/assets designated “secret” level.</p>

Supply Arrangements

	<ul style="list-style-type: none"> ✓ ADVISOR Enterprise PWGSC Supply Arrangement # EN578-100808/332/EE. ✓ Strategic Learning Advisory Services PWGSC Learning Services Supply Arrangement Stream 1 # E60ZH-1800LS/013/ZH. ✓ Instructional Design and Development Services PWGSC Learning Services Supply Arrangement Stream 2 E60ZH-1800LS/015/ZH.
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