

A quality management model for a high performance organisation: Finnish Air Force



Criteria for High Performance Organization What is behind Quality Management in FAF ?

Dr. Henry Sivusuo, Finnish Air Force Command

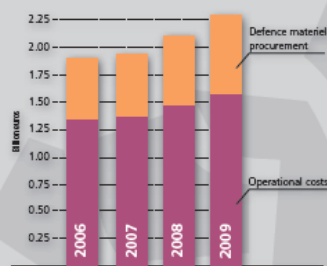


Introduction



Defensive Counter Air

Operational costs and defence materiel procurement



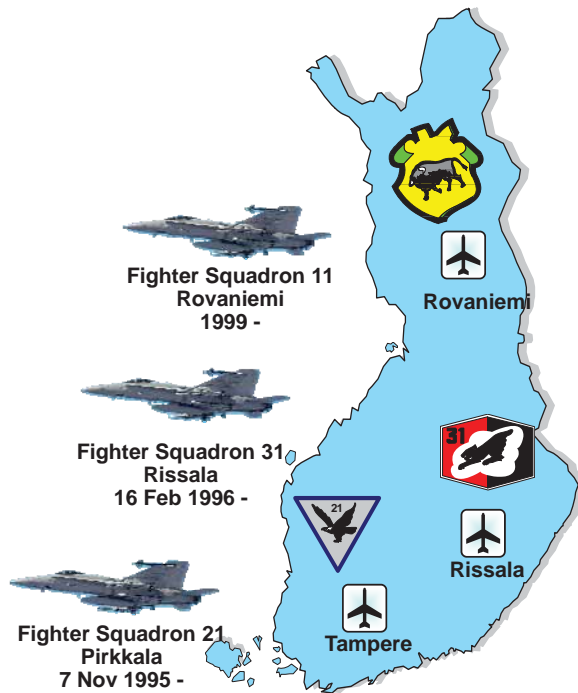
NATIONAL (HOMELAND) DEFENCE
Executive assistant to other authorities
INTERNATIONAL CRISIS MANAGEMENT

3 000 personnel
1 200 conscripts
War time 35 000

Finland is non-aligned (military)
PfP (Partnership for Peace) to NATO



Three F-18 Fighter Squadrons



Fighter Squadrons:

- 20+ F-18 Hornets
- 6 liaison a/c
- 40 pilots
- 50 maintainers
 - O-level
- 20 conscript maintainers

Maintenance Shop:

- 60 Persons
- I-level



AIRCRAFT INVENTORY

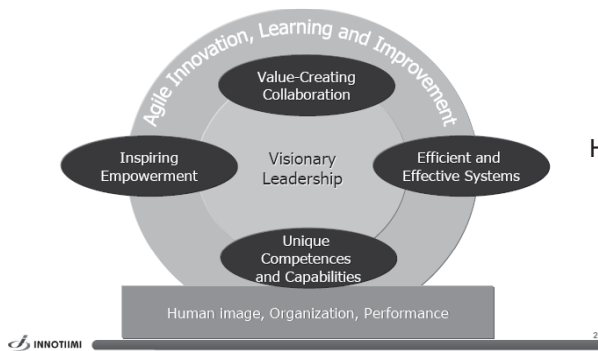
	Type	FOC	Total
Fighter	F-18C/D Hornet	1995	55 + 7
Advanced Trg	Hawk Mk 51	1980	49 + 18
Basic trg	Vinka	1980	28
	CASA C-295M	2007	2
Transport	Fokker F.27	1980	2
	Learjet 35 A/S	1982	3
	Pilatus PC-12	2010	6
Liasion	Redigo	1992	9





The concept of high performance organisation (HPO)

HPO framework by Innotiimi High Performance Organization



A high performance organisation is an organisation that achieves results - both financial and non-financial - which are better than those of its peer group over a longer period of time, by being able to adapt well to changes and react to these quickly, by managing for the long term, by setting up an integrated and aligned management structure, by continuously improving its core capabilities, and by truly treating the employees as its main assets

HPO characteristics in **Andre de Waal's** model

1. Visionary leadership
2. Unique competences and capabilities
3. Inspiring empowerment
4. Value-creating collaboration
5. Efficient and effective systems
6. Agile innovation, learning and improvement

1. High quality of management
2. Openness coupled with action orientation
3. Long-term commitment
4. Focus on continuous improvement and renewal
5. High quality of workforce

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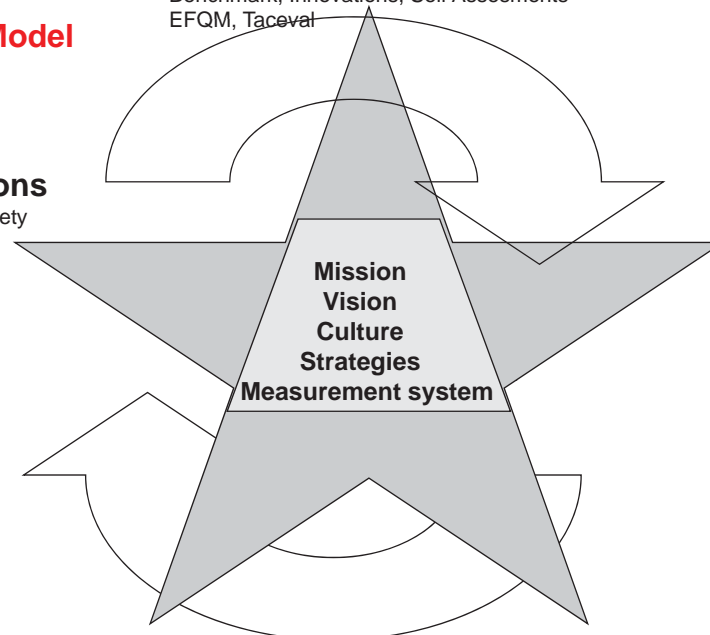


FINNSTAR Model

Flight Safety Actions
Programs for better flight safety

Continuous improvement

Benchmark, Innovations, Self Assessments
EFQM, Taceval



Personal Quality

Cognitive thinking
Attitudes
Values
Commitment
Statistical thinking

Military Aviation Authority

Audits
Military Flight Regulations

Quality assurance

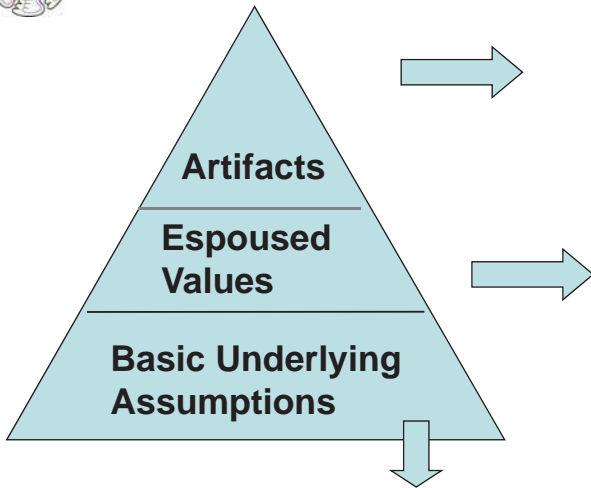
Culture
Guiding principles

FINNSTAR holistic model:
Essential elements in Finnish Air Force quality management and continuous development

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Air Force culture



Uniforms and especially pilot uniforms that represent **strong symbolism and team spirit**,
 Air Force -like military behaviour, **Lack** of a common identity among service members in technical career fields and among non-uniformed personnel;
 Respect of veterans, casualties and fighter aces;
 Heritage days, anniversaries,
“Full speed ahead” attitude

Experts are appreciated and they can influence decision making;
 Controlled risk management in military aviation;
 Flat management culture,
 Management by results;
 Low occurrence reporting threshold,
Non-punitive approach towards incidents;
 Internally motivated workforce that needs resources and opportunities,
 Avoidance of ranking between Air Force units.

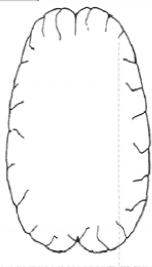
Trust in others,
 Appreciation of others;
 Appreciation of an analytical approach and organising abilities,
 Continuous development of processes in all branches;
 Perception of flight safety in all that is done;
Openness for benchmarking to foreign organisations;
Self-direction as a reflection of the Finnish national culture, independent initiatives; performance based assessment,



Cognitive styles

A cognitive style is a general way to process information, but is also a learning style and decision-making style.

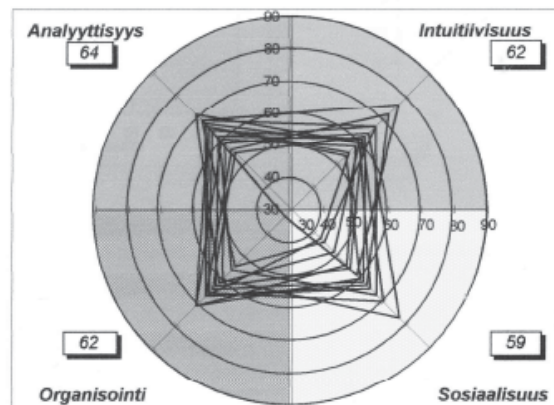
ANALYTICAL
 (Upper left)
 Logical
 Analytical
 Technical
 Economical



INTUITIVE
 (Upper right)
 Holistic
 Imaginative
 Innovative
 Visionary

ORGANIZING
 (Lower left)
 Systematic
 Detailed
 Task oriented
 Formal

SOCIAL
 (Lower right)
 Human relation
 People orientation
 Emphatic
 Expressing feelings



A survey among the Air Force’s key personnel found that the cognitive styles of officer pilots and engineers were directed to the left side of the brain, which is the analytical and organising side. This is not surprising. We have to remember that the **Air Force has achieved much success stemming from these two cognitive styles**. However, in a **changing situation**, we need innovations so the right upper lobe will become important. To lead an organisation during a period of change requires intuitiveness and creativity. The intensity of social life and human relations, which are governed by the lower right lobe, is important when commitment is desired. As a special case, it came up that the social dimension of officer pilots showed a wide dispersion indicating the presence of some very social individuals. This dispersion was clearly wider than that observed among engineers. Otherwise, engineers are grouped on the left side lobe.



Finnish Air Force activities in relation to HPO criteria

HPO characteristics (Innotimi and de Waal combined)	Occurrences in Air Force; strengths and weakness
Human image, organisation, performance	Self-directive , organisation learns continuously without being aware of it; performance oriented but performance not specified on all strategy areas; regarded as efficient organisation by society due to abundance of resources; holistic view missing; cause-and-effect thinking dominates; has positive impact on society and uses resources effectively and efficiently.

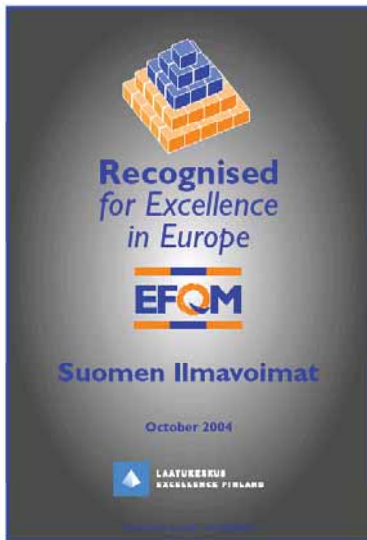
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Finnish Air Force activities in relation to HPO criteria

1. Visionary leadership and quality of management	Excellence is unfamiliar concept although despite use of EFQM criteria that has continued for some time, branches strive for excellence without using this phrase; low hierarchy helps reach management, confidence to other workers on every level of organisation; visionary leadership missing, well known strategies do exist and management is starting to use them, fear that strategies do not get response in Defence Forces; good physical condition valued.
2. Inspiring empowerment, openness	Privilege to self-direction , individuals awarded instead of teams; best reporting system looking for weak signals, non-punitive approach , safety orientation creates communal spirit, flight safety is common concern.
3. Unique competences and capabilities	Outstanding core competences (flight training, defensive counter air, airspace surveillance); successful recruiting, continuous training; tacit knowledge change in knowledge holder groups, no exact method to transfer tacit knowledge from experts to successors.
4. Long-term commitment and collaboration	Close networks with interest groups in society, good media relations with commander's annual press conference; long-term agreements with strategic partners ; safe and secure workplace with no lay-offs.
5. Innovation, learning, continuous improvement	Workers motivated to lifelong studying; excellent results from benchmarking to foreign organisations, constant training for performance improvement, internal will to develop activities everywhere in organisation; strong occupational groups (officer pilots and engineers) do not accept ideas from outside their peer groups ("not invented here" principle); successful anticipation of interest groups' needs based on innovations (in flight training, Hawk purchase from Switzerland, international exercises, passing of TACEVAL, multi sensor tracking), innovations and development are very dependent on suitable and willing individuals (organisation is not innovating or developing, but individuals are).
6. Efficient and effective systems	Products and services (aircraft utilisation, flight hours per number of aircraft, total amount of personnel) produced efficiently; difficulty in measuring value for customer; functional organisation structures hamper process thinking, advantages of process thinking not realised.

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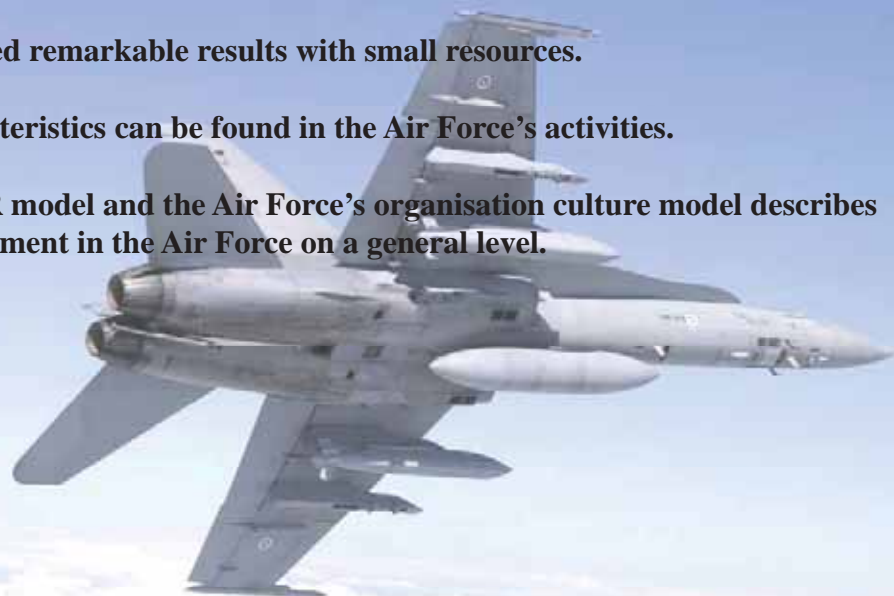


Conclusions

FAF has achieved remarkable results with small resources.

All HPO characteristics can be found in the Air Force's activities.

The FINNSTAR model and the Air Force's organisation culture model describes quality management in the Air Force on a general level.



Thank You for Your attention