Developing Resilience
Human Factors and Instructor Training

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What is “Human factors”

Culture

CRM

Human error

MAN MACHINE INTERFACE

Disorientation

Behavior

Aviation medicine

ERGONOMICS

FATIGUE

Psychology

HR

Performance
Human Factors are:

Anything that affects a person’s performance
The factors

Direct

Performance
The factors

Managing

Performance
The factors

Performance

Potential
The acts or omissions that directly affect performance

Direct factors

- Decision
- Dexterity
- Distraction/concentration
- Awareness/memory
Potential factors

Design  
Environmental  
Fatigue  
Illness  
Visual illusions  
Memory  
Time  
Organizational  
Commercial  
Automation  
Security  
Political  

System failures  
Psychological  
Physiological  
Language  
Procedures  
Alert systems  
Emergencies  
Relationships  
Documentation  
Cultural  
Stress  

The factors that make these more likely
Managing factors

Things that manage the effect of the Potential Factors and improve Direct Factors
Managing factors - organization

Performance review
Training
SOPs
Checklists
System review
Organisational

Performance

Briefings
IT
Tools
Culture change
Motivation
Admin support
Managing factors-individual

Performance

- Threat & Error Management
- Communication
- Teamwork
- Leadership
- Positive attitudes
- Behaviour
- Planning
- Problem prevention
- Workload management
- Situation awareness

Problem solving
- Discipline
- Decision making
- Concentration
- Stress management
- Monitoring
- Fitness
- Knowledge
- Technical skills
Human factors

- Direct Factors
- Potential Factors
- Managing Factors

- Performance
  - Distraction
  - Awareness
  - Decision
  - Dexterity
Human Factors

- Direct Factors
- Potential Factors
- Managing Factors

Resilience
Performance
Resilience
MAJOR THREATS

FATIGUE
MAJOR THREATS

STARTLE
INSTRUCTORS ARE KEY!!
Instructors

Aggressive, abusive and intimidating
Superior, arrogant and know it all
Don’t listen and talk too much
Cannot observe objectively
Do not have an open mind
Leave student guessing
Instructors

- Manage Safety
- Prepare the Training Environment
- Manage the Trainee
- Conduct Training
- Perform assessment
- Perform course evaluation
- Continuously improve performance

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Patient and has a positive attitude
Shows humility and admits mistakes
Encourages and is honest
Non-judgmental and shows empathy
Supportive, respectful and honest
Good knowledge
Core competencies

Application of Procedures
Communication
Flight path management automation
Flight path management manual
Knowledge
Leadership & teamwork
Problem solving & decision-making
Situation awareness
Workload management
Where did they come from?
Role Model

+ Work hard - get stuck in
+ Motivated - self-locked
+ Knowledgeable - Skilled
+ Time efficient work - Prioritise
+ Clear of thought - fair
+ Calm in a crisis
+ Clear & specific
+ Respect others
+ Patience - Task/People
+ Calmed others - Smile / relaxed / encouraging
+ Polite / Respected in their communications
+ Non-judgemental
+ Confident in their own ability
+ Able to ask for help
+ Empathy - Valuing others
+ Listening / Supporting others
+ Reliable - do as they say they will
+ Treat people equally
+ Sense of humor
Are there cultural differences?
1. Действует уверенно
2. Обладает кабаками
3. Проходит, день-
4. Уровнениями
5. Образованы
6. Лёгкий в общении
7. Героиев
8. Натуралист
9. Дружелюбный
10. Юмор.
11. Камыш
12. Признака
13. Оты
Good Pilot

Accept F/O advice
Willing to discuss decisions

Prepared & Briefed Precisely

Follows procedures

Savvy about situation
Relaxed; listen even when gave advice

Warm; approachable
Motivating

Open-minded
Age gap

Experienced

Trust

Not embarrassed others

Respects others

Friendly

Responsive

Adaptable
1. 明确了学习目标
2. 好的教学节奏
3. 好的点评
4. 亲和力
5. 条理性和逻辑性
6. 实践
7. 责任心和充分的教案准备
8. 形象（包括外表及语音语调）
9. 语言组织能力和表达能力
10. 教师的知识面（广、深、厚）
11. 课堂的组织
12. 诚实、耐心
13. 创造性
14. 与学生进行
Not so good...
“나쁜 X”

- 배려심이 없다
- 자기주장이 강한 사감
- 양면성이 없는 사감
- 근방산 사감 (rude)
- 전치자를 잃고 사감
- 본인감은 두려 사감
- 식수로 인해 힘들지 않은 사감
- 공정하지 않은 사감
- 준비가 안된 사감
- 게으른 사감
- 냄새 맡은 안동사
- 냄새 맡는 안동사
- 나쁜 냄새 맡는 사감
- 마른 냄새 맡는 사감
- Don't care
- Not interested
- Not listening
- Doesn't care
Cultural differences do not exist with high performing professional teams !!
Leadership, Management and Quality

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