



Two Challenges to Enhance JAL SMS Cycle

2007.10.26

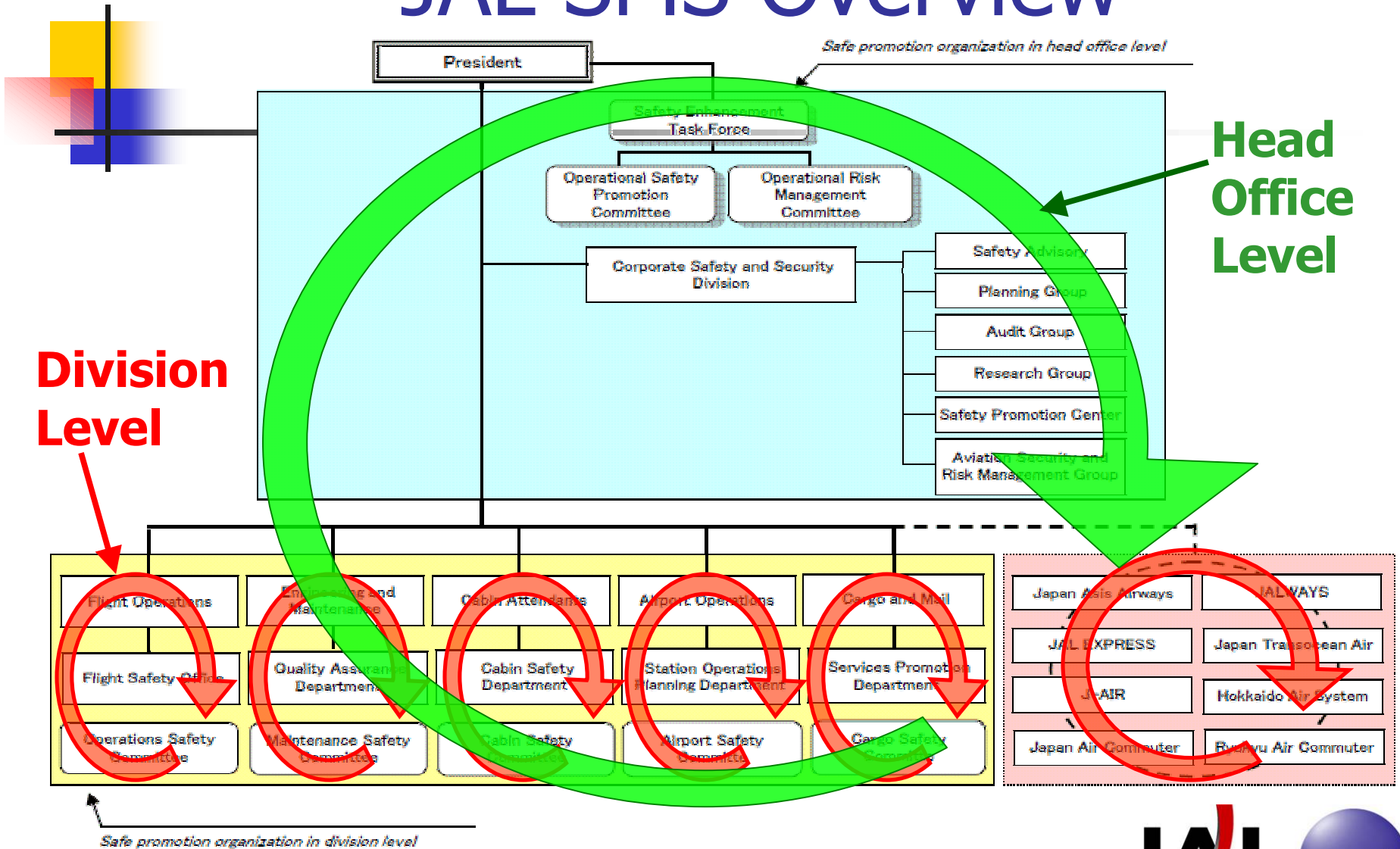
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- JAL SMS Overview
- Two Challenges to Enhance JAL SMS Cycle

JAL SMS Overview





JAL SMS Overview (Cont'd)

< Activities in Division Level - Examples >

- Safety Committees in Each Division ALL
- Reporting Systems (Mandatory/Voluntary) ALL
- FDM (Flight Data Monitoring) FLT OPS
- LOSA (Line Operations Safety Audit) FLT OPS

- MEDA (Maintenance Error Decision Aids) MNT

- Human Factors Adviser Program MNT
- Maintenance Audit Program MNT



JAL SMS Overview (Cont'd)

< Activities in Head Office Level – Examples >

- Safety Management Manual
- Safety Enhancement Task Force & Operational Safety Promotion Committee
- Establishment of Handling Policy for Human Error
- Safety Audit Program
- Safety Information Database
- FSAT (Flight Safety Advisory Team)



Two Challenges to Enhance JAL SMS Cycle

- Improvement of Interview Skill
- Development of Analysis Supporting Tool with Applying Text Mining



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Improvement of Interview Skill

< Target >

- Improvement of Quality in Interview and Analysis

(To Collect More Useful and Detailed Information)

Approach to Latent Conditions
More Effective Countermeasures

Enhancement of Reactive SMS Cycle

Improvement of Interview Skill

(Cont'd)

< Training for JAL Core Members >

- APR.2007 BOEING Safety Management Support Training (Lectured by BOEING Instructor)
 - Safety Management Overview
 - BOEING Analysis Tool (PEAT, CPIT, REDA) & Exercise of Interview & Analysis
- JUN.2007 Lecture by Clinical Psychotherapist
 - Technique for Interview from the Psychological Point of View

Improvement of Interview Skill

(Cont'd)

< Future Plan >

- Now, Preparing a Pamphlet Picking up Main Points of the Training & Presentation
 - For Interviewers and Analysts in Each Division (Except for MNT Division already introduced MEDA Program)



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- Improvement of Interview Skill
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Analysis Supporting Tool

< Outline of This Tool >

- Advanced Text Mining
- Support Analyzing a Large Number of Text Information with Computer (Trend Analysis & Factor Analysis)
- Semi-automatic Analysis Supporting Tool
 - Support to Find out the Factor which is liable to be missed
 - Final Process of Analysis should be Done by Analyst



Analysis Supporting Tool (Cont'd)

< WHY TEXT MINING ? >

- Text Information is the Amount of Wealth
- However, Today,
 - Analyzed Text Information by Analyst
 - Human Ability is Limited
 - Insufficient Use for SMS
 - Computer Supported Analysis is Available only for Numeric Characters or Codes (Date, FLT No., Type of A/C, Predictable Factors etc.)



Analysis Supporting Tool (Cont'd)

< Effect >

- Enable to Analyze Multilaterally a Large Number of Text Information in Short Time
- Support to Find Out the Common Latent Conditions from Many Events

Enhancement of Proactive SMS Cycle



Analysis Supporting Tool (Cont'd)

< Progress & Schedule >

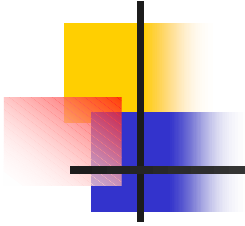
- Joint Research by Fujitsu Laboratories LTD., the University of TOKYO & JAL (2004~)
- Trial Use for Some Types of Reports will Start at the End of This Year



Analysis Supporting Tool (Cont'd)

< Issues >

- Verify Accuracy by Trial
- Facilitate to Apply to Various Types of Reports



THANK YOU !