



Fundamentals of IS-BAO

International Standard for Business Aircraft Operations





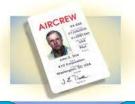














MÉXICO

Fletamento y Taxis Aéreos 2,106

Centros de Adiestramiento 30

Talleres Aeronáuticos 316

Operadores de Estado



Dictamen COFEMER/12/2490





International Business Aviation Council (IBAC)

- Represents the Interests of Business Aviation Worldwide
- Non-Government Organization
- Permanent Observer Status with ICAO
- Manage the IS-BAO Program
- 14 Member Associations

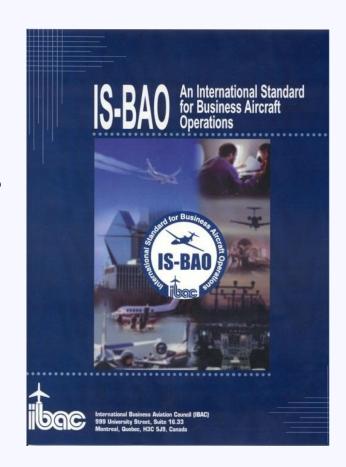






IS-BAO Principles

- Professional Code of Practice
- Voluntary Registration Not Required
- Promotes Harmony of Operating Practices
- Scalable Fits all Sizes, Missions, Aircraft
- SMS is the Foundation

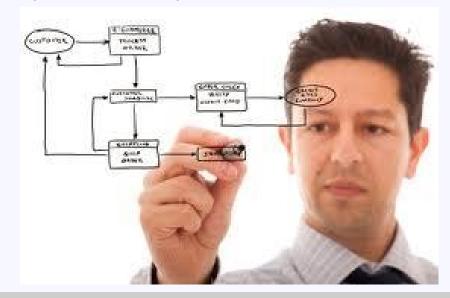






IS-BAO – Based on Quality Principles

- Document Key Safety-Related Processes & Procedures
- Assign Process Ownership
- Determine Points to Measure Effectiveness
- Determine Success Criteria Quantify or Qualify
- Measure and Analyze Trends
- Continuous Improvement







IS-BAO Standards Development

- IS-BAO Standards based on:
 - ICAO Standards and Recommended Practices (SARPs)
 - Business Aviation Best Practices
- Many Standards are Performance-Based
 - Describe WHAT the Operator Must Do
 - The Operator Determines HOW

Fatigue Management



Training Programs







IS-BAO Connection to ICAO SARPs

- ICAO Annex 19 (SMS)
- ICAO Annex 6 (Operations)
- Other Annexes as Appropriate

- Annex 1 Personnel Licensing
- Annex 2 Rules of the Air
- Annex 3 Meteorological Services
- Annex 4 Aeronautical Charts
- Annex 5 Units of Measurement
- Annex 6 Operation of Aircraft
- Annex 7 Aircraft Nationality and Registration Marks
- Annex 8 Airworthiness of Aircraft
- Annex 9 Facilitation
- Annex 10 Aeronautical Telecommunications
- Annex 11 Air Traffic Services
- Annex 12 Search and Rescue
- Annex 13 Aircraft Accident and Incident Investigation
- Annex 14 Aerodromes
- Annex 15 Aeronautical Information Services
- Annex 16 Environmental Protection
- Annex 17 Security
- Annex 18 The Safe Transportation of Dangerous Goods by Air
- Annex 19 Safety Management Systems





IS-BAO Provides a Framework and Structure





Before IS-BAO

After IS-BAO





SMS Development and Implementation









Precursors to an Accident

Latent Conditions

- Ineffective Policies
- Poor Processes/Procedures
- Inadequate Training
- Conflicting Goals

Active Conditions

- Errors/Violations/Deviations from:
 - Company Policies
 - Company Process/Procedures
 - Manufacturer Procedures
 - Regulations



Capture via
FOQA,
Supervisor
Observations,
Debriefs,
Reporting
Systems





IS-BAO 3.2: SMS Requirements

SMS appropriate to the size and complexity of the operation

Based on ICAO (4 Components / 12 Elements)

Facilitates State Recognition







Standards and Recommend Practices











4.0 Organization and Personnel Requirements

- Accurate Organizational Chart
- Every Position in the Organization Shall Have:
 - Job Description
 - Defined Qualifications
 - Duties and Responsibilities
- Use of Psychoactive Substances
- Portable Electronic Devices (PEDs)
- Fatigue Management for Everyone







5.0 Training and Proficiency Chapter

- 5.1 Training Programs
- 5.2 CRM and Human Factors
- 5.3 Emergency and Safety Procedures
- 5.4 High Altitude
- 5.5 Proficiency Certification
- 5.6 Training / Qualification Records

- Flight Crew
- Cabin Crew
- Other Crew
 - Scheduler
- Maintenance







6.0 Flight Operations Chapter

- 6.1 Standard Operating Procedures
- 6.2 Flight Planning and Pre-Flight
- 6.3 Operational Control
- 6.4 Weather Minima
- 6.5 All Weather Operations
- 6.6 RNP, MNPS, RNAV & RVSM
- 6.7 Aircraft Operating Requirements
- 6.8 Noise Certification and Abatement
- 6.9 Aircraft Airworthiness
- 6.10 Use of Oxygen

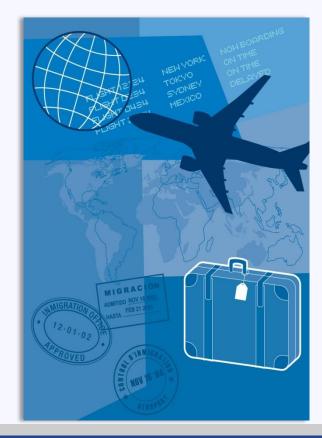
- 6.11 Passenger Safety Briefing
- 6.12 Use of Checklists
- 6.13 Fatigue Countermeasures
- 6.14 Travel Health Issues
- 6.15 Seating Requirements
- 6.16 Cabin Baggage
- 6.17 Microphones
- 6.18 Qualification to Taxi Aeroplane
- 6.19 Helicopter Rotor Under Power
- 6.20 Maintenance Check Flights
- 6.21 Competency in Key Safety Areas





7.0 Ops in International Airspace (2014)

- Pertains to ops outside sovereign airspace only
- Requirements
 - Operating procedures (SOP's)
 - Training
 - Flight crew
 - Library authorization







8.0 Aircraft Equipment Requirements

- General
- Communication and Navigational
- Operational Info and Documentation
- Seats, Safety Belts & Harnesses
- Emergency Equipment General
- Flights over Water
- Flights Over Remote Land Areas

- Icing Protection & Wx Detection
- ELT / GPWS / ACAS II
- Transponder & Altitude Reporting
- FDR and CVR
- Minimum Equipment List





9.0 Aircraft Maintenance Requirements

- 9.1 Maintenance Control System
- 9.2 Maintenance Agreements
- 9.3 Person Responsible for Maintenance
- 9.4 Maintenance Personnel Recency







10.0 Company Operations Manual

- Must have table of contents & amendment status
- Templates are helpful, but make it "Your Manual"
- Provisions and approval authority for deviations from manual (if deviations allowed)







11.0 Emergency Response Plan

- Aircraft accident and incident procedures
- In-flight incidents
- Other accidents, incidents, emergencies
- 11.5 Shall Train Personnel and test the plan (2013)









12.0 Environmental Management

- Noise abatement procedures
- Ground operations, fueling, deicing/ anti-icing
- Disposal of waste materials and international garbage
- Facility construction and operations
 - Fueling facilities
- Emissions trading







13.0 Occupational Health and Safety

- Workplace safety program
- Fire, first aid and sanitary requirements
- Safety/protective clothing, devices and equipment
- Employee safety information and training
- Machinery, tools and equipment
- HAZMAT procedures and training















Recommend procedures for ANY person working alone (2014)

14.0 Dangerous Goods

If the Operator Does NOT carry:

- Passenger training & notification
- Crewmember training each 2 years

If the Operator Carries:

- Regulatory requirements
- Procedures/ Emergency procedures
- Training



Prepare for Takeoff Prohibited Items List







15.0 Security

Security Program includes

- Threat assessment
- Preventative measures
- Responsive measures
- Training
- Testing



















