

TechPubs, Inc. White Paper
Demonstrating Compliance Using FlightComply
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1. What are the Objectives of Universal Standards?

Airlines are among the most heavily regulated industries on the planet. Standards can be found in the laws of each particular country (FAA, CAA, etc.), as well as regionally (EU), and finally, internationally (IOSA). Airlines must design their manuals so as to comply continuously with the applicable standards. Authorities inspect each carrier on a scheduled and random basis to determine compliance, and each inspection begins by reviewing the carrier's publications to determine if the documents prescribe compliant behavior. Depending on the carrier's business model, compliance could take many forms: IATA Operational Safety Audit (IOSA) ensures international air carriers are compliant with local standards, and operate with safety and internal evaluation systems. IOSA audits must be accomplished every two years, and include a manual review plus an on-site inspection. In the USA, the FAA uses the Air Transportation Oversight System (ATOS) to evaluate compliance of US-certified airlines. There are other inspection checklists, such as US Department of Defense (DoD), and country-specific inspections, but ATOS and IOSA compliance are major milestones for an airline. ATOS and IOSA are similar in that they focus an auditor, or an internal evaluation program (IEP) on critical processes within the carrier. Processes are multi-functional groupings of procedures that support a common, important program, such as "De-icing program", or "Carry-on Bag program."

2. What is the Difference between Process Inspections and traditional Compliance Checks?

Compliance checks are specifically targeted to items of interest, such as "pilot training records" regardless of the critical processes these items support. Compliance checks are the traditional method by which inspection teams search for safety problems; and non-compliant records or activities were assumed to be the major symptoms of latent safety problems. Now, ATOS and IOSA inspections examine whole critical processes, because it is now assumed that safety lapses occur from broken processes. However, all the manuals written for airline personnel are procedural, driven by the need to explain exactly how each job is to be performed. They are not process manuals, because most processes involve employees from various career fields, to include external support companies and government agencies.

While regulatory agencies often require airlines to generate process manuals and process compliance statements, these are of little use for airlines, because the carriers operate using dozens of procedural manuals. Writing a process manual is labor intensive, and difficult; keeping it up to date with changing procedures is almost impossible if done manually. Our goal at TechPubs is to automate the creation and currency of process manuals from the procedural manual data, and automate the creation and currency of process inspection checklist compliance tables.

3. How Do Airlines Demonstrate Compliance?

FlightComply is a data organization system designed to help air carriers demonstrate compliance with various and changing standards, using the data contained in the company's manual system. Inspectors need to know:

- i. What is the airline's regulatory requirement for this process?
- ii. Where do the requirements exist in all the employees' manuals?
- iii. What activities should I observe to see compliance in action?

Conscientious airlines will use the same data in periodic self-evaluations, which are important, because the regulatory requirements change, as does the composition and

mission of the company. To assist the customer, TechPubs must take the data from the manual system and organize it for compliance purposes. Current demonstrations of compliance take the form of compliance tables, for example: In column one, list the inspection item by paragraph (under ATOS, this is the SAI, or Safety Attribute Inspection, paragraph and sub-paragraph). Next column, where in our manual system is this requirement covered? And maybe, three: What activities do we inspect to ensure we comply in practice? Remember that inspection checklists, the underlying regulations, and the airline itself, all change continually, so periodic re-generation of compliance tables is required. Airlines being inspected will commonly give a copy of the compliance table to visiting audit teams in advance to minimize time wasted paging through manuals.

4. How Does FlightComply support the customer airline?

TechPubs begins with publications analysis by SMEs who are cognizant of ATOS and IOSA checklists and current editions. Then, by converting the compliance checklists and the customer manual set into a common format, TechPubs conducts an electronic search to generate the initial compliance statements and tables. Customer and TechPubs consultants review each instance of compliance or non-compliance, and tag the valid paragraphs in the customer's manual. Non-compliance is evaluated, and if required, manual changes are made by the customer team. Thereafter, at each agreed-upon period, the inspection checklists are updated, and the compliance query is re-run against the current publications database to capture compliance with each change to the inspection criteria.

The TechPubs automated process, FlightComply, eliminates the need for hundreds of valuable manager-hours of compliance verification on the publications system, which is the major barrier for airlines and the FAA regulators in meeting ATOS certification deadlines. FlightComply also tags compliant areas of the entire, cross-disciplinary publication set, which facilitates the generation of process manuals on-the-fly. Finally, since published evidence of compliance is tagged permanently, changes in pubs or requirements can be updated across the manual set very quickly in the future. Thus, FlightComply, the patented compliance tool from TechPubs, has proven to be a valuable asset in assisting airlines striving for an economical solution to safety and regulatory compliance.