



Audit Protocol Analysis

Prepared for WYVERN, Ltd

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Overview

- Scope of Work
- Methodology
- Analysis vs ICAO Annex 6 – Operation of Aircraft
- Analysis vs ICAO Annex 19 – Safety Management
- Conclusions

Scope of Work

- Citadel Consulting, LLC was retained to analyze and compare the four business aviation audit protocols versus the ultimate source documents:
 - ICAO Annex 6 – Operation of Aircraft
 - ICAO Annex 19 – Safety Management
- The audit standards compared were:
 - ISBAO (2018)
 - WYVERN Wingman (2020)
 - Air Research Group, US (ARG/US)
 - Air Charter Safety Foundation
- We provided conclusions on the level of compliance of each standard versus the ICAO documents

Methodology

- Copies of the ICAO Annex 6, ICAO Annex 19 and all protocols to be analyzed were obtained
- A comparison checklist was constructed which featured the chapters and sub-chapters for both ICAO Annexes
- Each protocol's framework and content were compared against ICAO Annex 6 framework and content using quantitative analysis
 - Where content was present, the applicable protocol was credited
 - Where content was not present, the applicable standard was not credited
 - Credits were tallied to determine the level of compliance for each protocol
- For ICAO Annex 19, general thoroughness of coverage for each protocol was analyzed using qualitative analysis

Analysis vs ICAO Annex 6 – Operation of Aircraft

ICAO Annex 6 contains 95 operational items, presented in 11 chapters

Protocol	WYVERN	IS-BAO	ACSF	ARG/US
Operational Items Covered	95	91	37	34
Percentage of Compliance	100%	95.8%	38.9%	35.8%
Compliance Ranking	1	2	3	4

Observations

- WYVERN is the only protocol that aligns precisely with ICAO Annex 6
- The ARG/US protocol addresses the organization's manuals, not the behavior of the organization itself

Analysis vs ICAO Annex 19 – Safety Management

- All protocols addressed the four elements of a safety management system:
 - Safety Policy and Objectives
 - Safety Risk Management
 - Safety Assurance
 - Safety Promotion
- WYVERN and IS-BAO provided the most detailed audit protocols and were the only protocols that addressed safety data and safety information exchange per Chapter 5 of the Annex
- The ARG/US Protocol addressed the SMS under the operations checklist – it did not provide a separate tool to evaluate the SMS
 - Checklist evaluates the organization’s manuals / publications, not the behavior of the organization itself
- ACSF SMS evaluation is limited to three pages of a 64-page document

Conclusions

- WYVERN’s audit protocol is the most compliant with ICAO Annex 6 and is the only protocol that aligns with Annex 6
- WYVERN and IS-BAO provide the most thorough SMS evaluation of the four protocols
- Rankings are as follows:

Protocol	WYVERN	IS-BAO	ACSF	ARG/US
ICAO Annex 6, Part 1	1	2	3	4
ICAO Annex 19	1 (Tie)	1 (Tie)	2	3
Overall Ranking	1	2	3	4