ICAO SAFETY

NO COUNTRY LEFT BEHIND

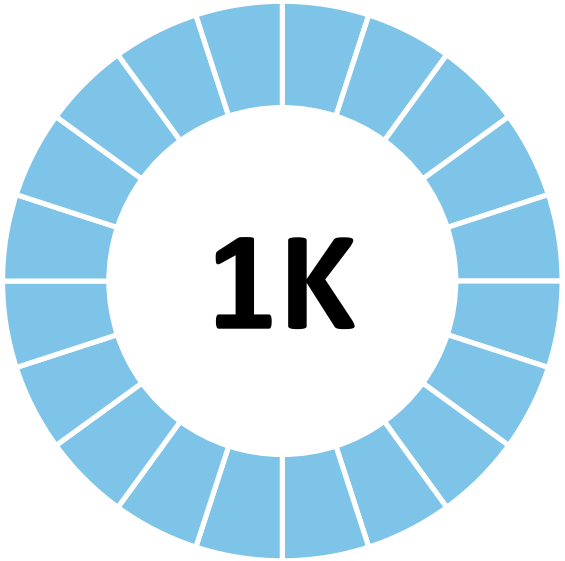
Risk Based Surveillance iStars App

Javier PUENTE

Safety Implementation Officer
SAM Regional Office
International Civil Aviation Organization (ICAO)

Montreal, December 2018

LACK OF RESOURCES



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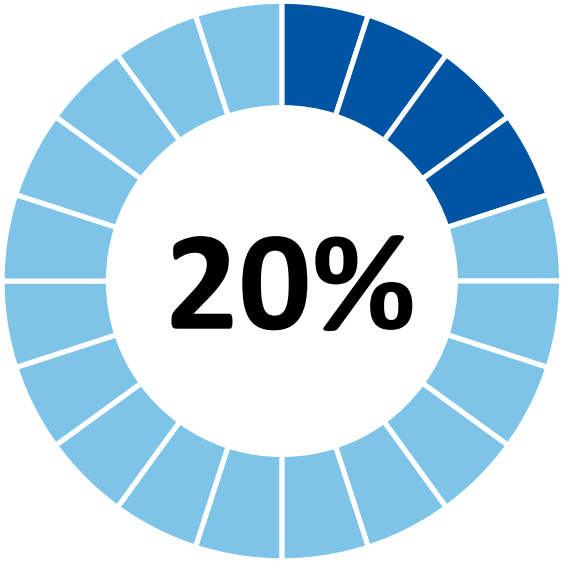

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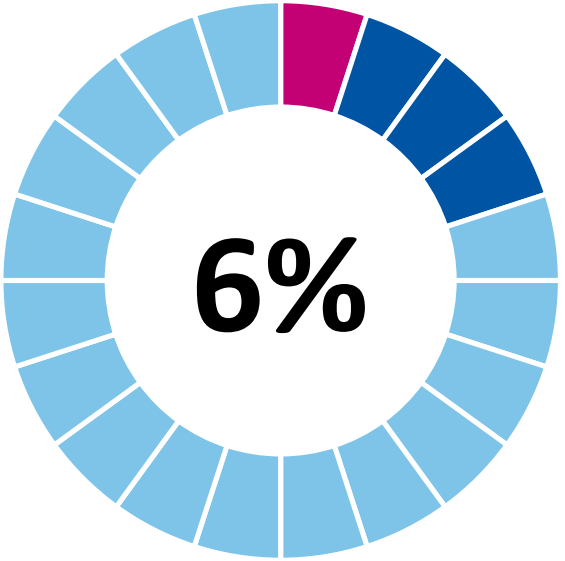


Closed

5933 work hours

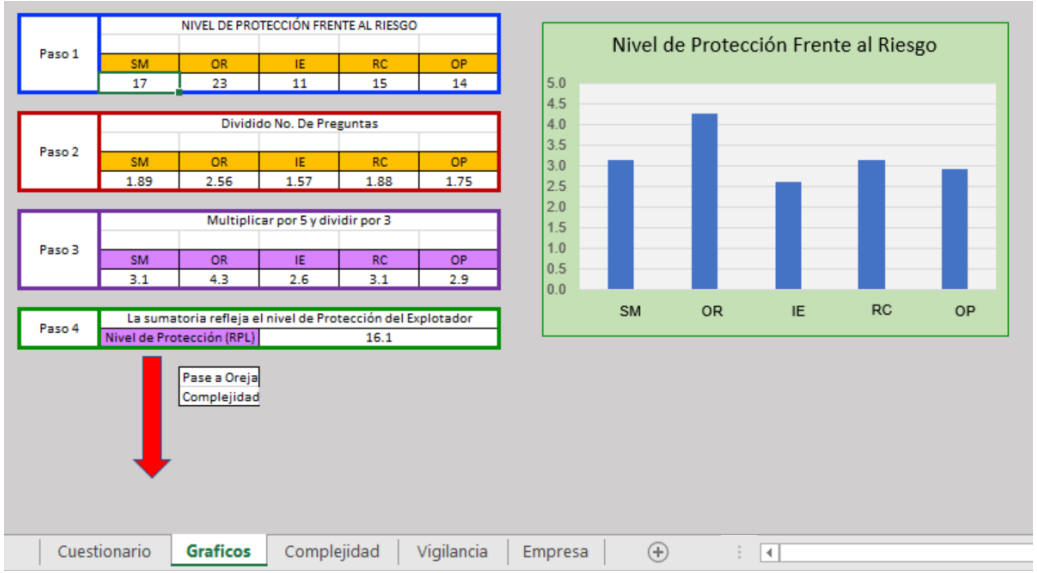
250,000 U$D

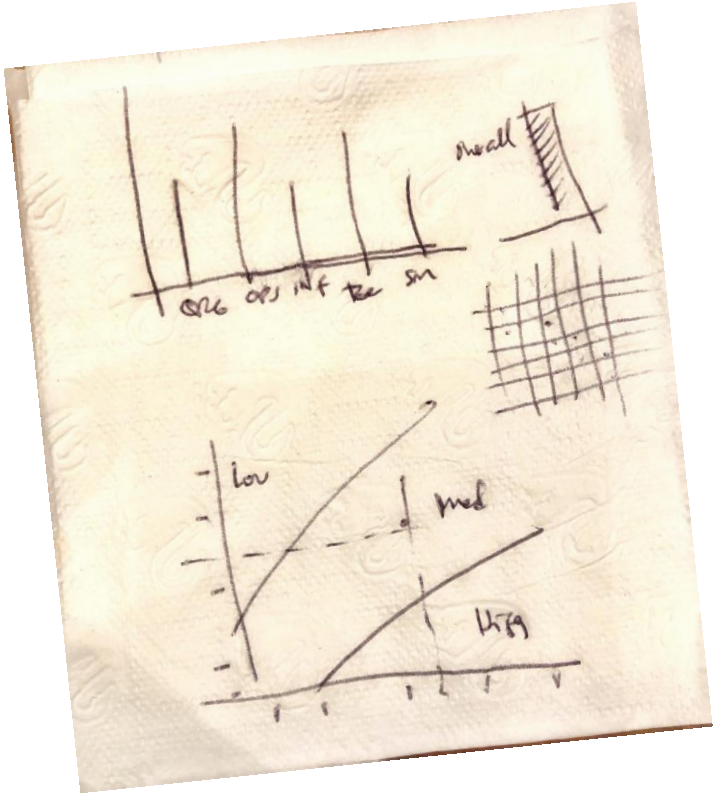
Risk Based
Resource Allocation Tool

Risk Profile
Risk Protection
ICAO Data
Own State Data
Other States Data
Industry Data
Risk Exposure
ICAO Data
Own State Data

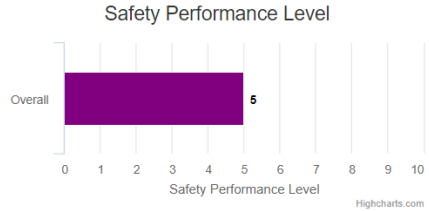
Figure 7 – Surveillance Intervals

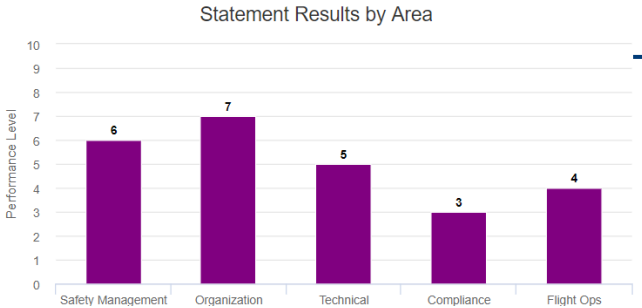
SIM Value	Surveillance Interval	
	Non-SMS Enterprise	SMS Enterprise
1A, 1B, 1C, 2A, 2B	5 year PVI	5 year Assessment
1D, 1E, 2C, 2D, 2E, 3A, 3B	4 year PVI	4 year Assessment
3C, 3D, 3E, 4A, 4B, 5A, 5B	3 year PVI	3 year PVI, 5 year Assessment
4C, 4D, 4E, 5C	2 year PVI	2 year PVI, 4 year assessment

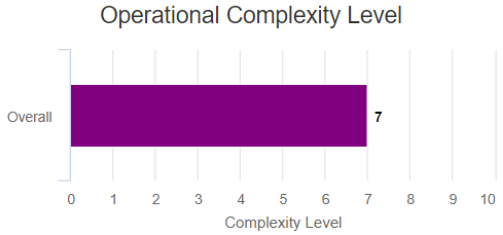



low
med
High

Risk Profile

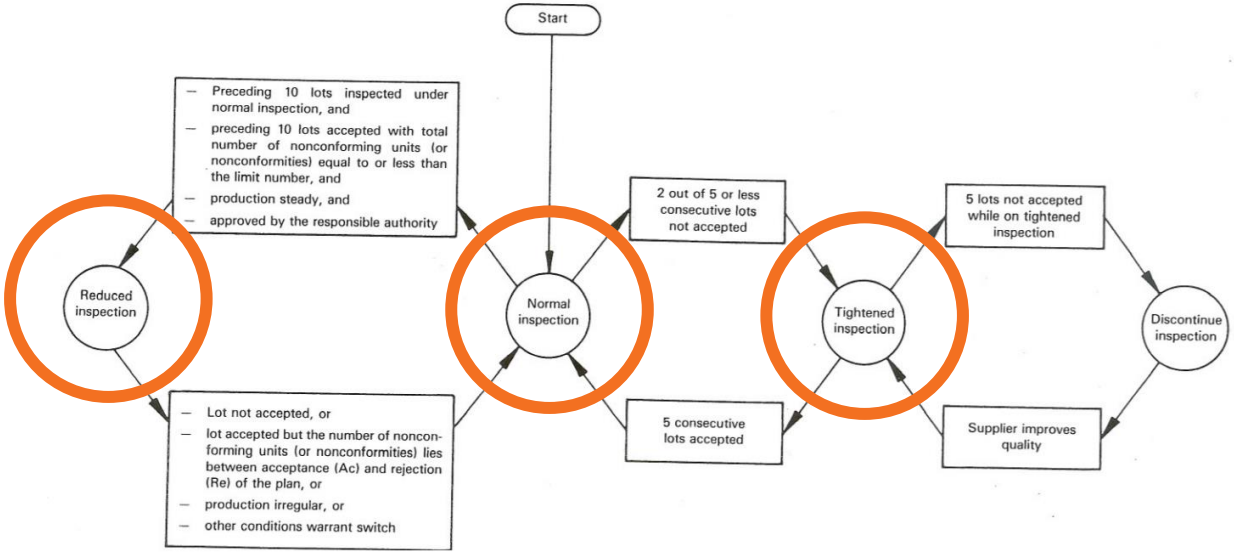




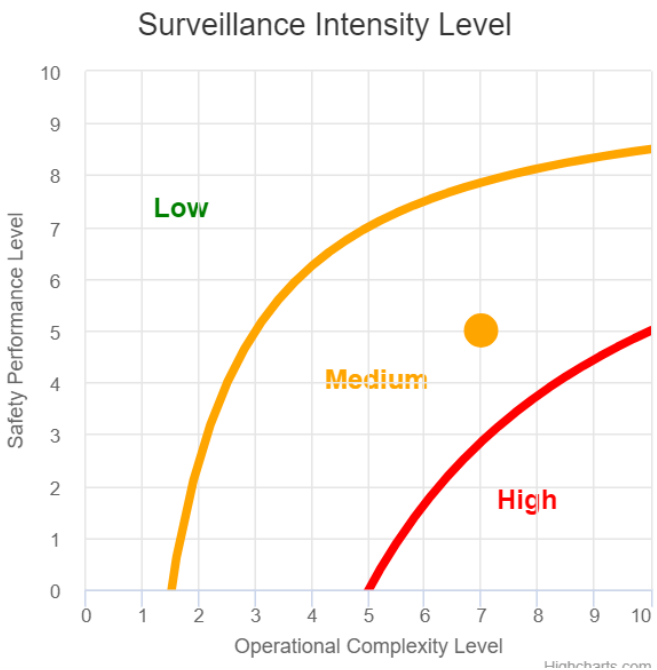


ISO 2058-1

Sampling Procedures for Inspection



Medium



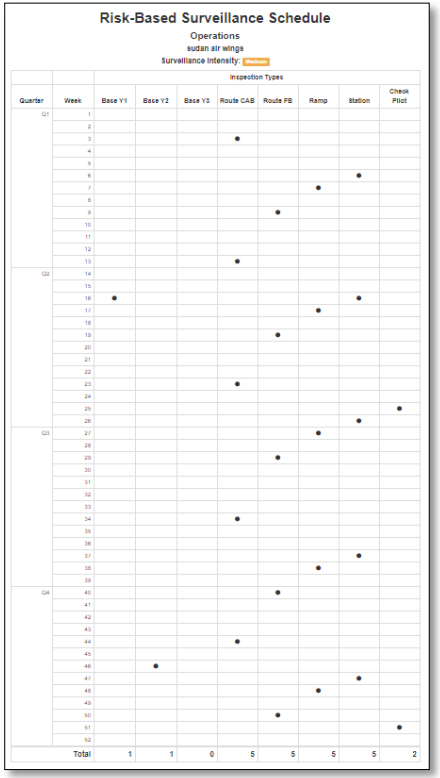
	Aircraft	Stations	Check Pilots
Population Size	16-25	16-25	2-8

The sample size is defined using the ISO sampling model. The base inspection is unique and is period only depends on the intensity.

Activity Type	Related Population	Minimum Activities	Peridiocity
Route Inspection - Cabin	Stations	5	2 months
Route Inspection - Flight Deck	Stations	5	2 months
Ramp Inspections	Aircraft	5	2 months
Station Inspections	Stations	5	2 months
Check Pilot Inspections	Check Pilots	2	6 months
Base inspection	-	1	18 months

The attached schedule integrates all the above inspections with their respective samples and distributes them over one year, 52 weeks. The base inspection schedule covers 3 years.

Download as XLS



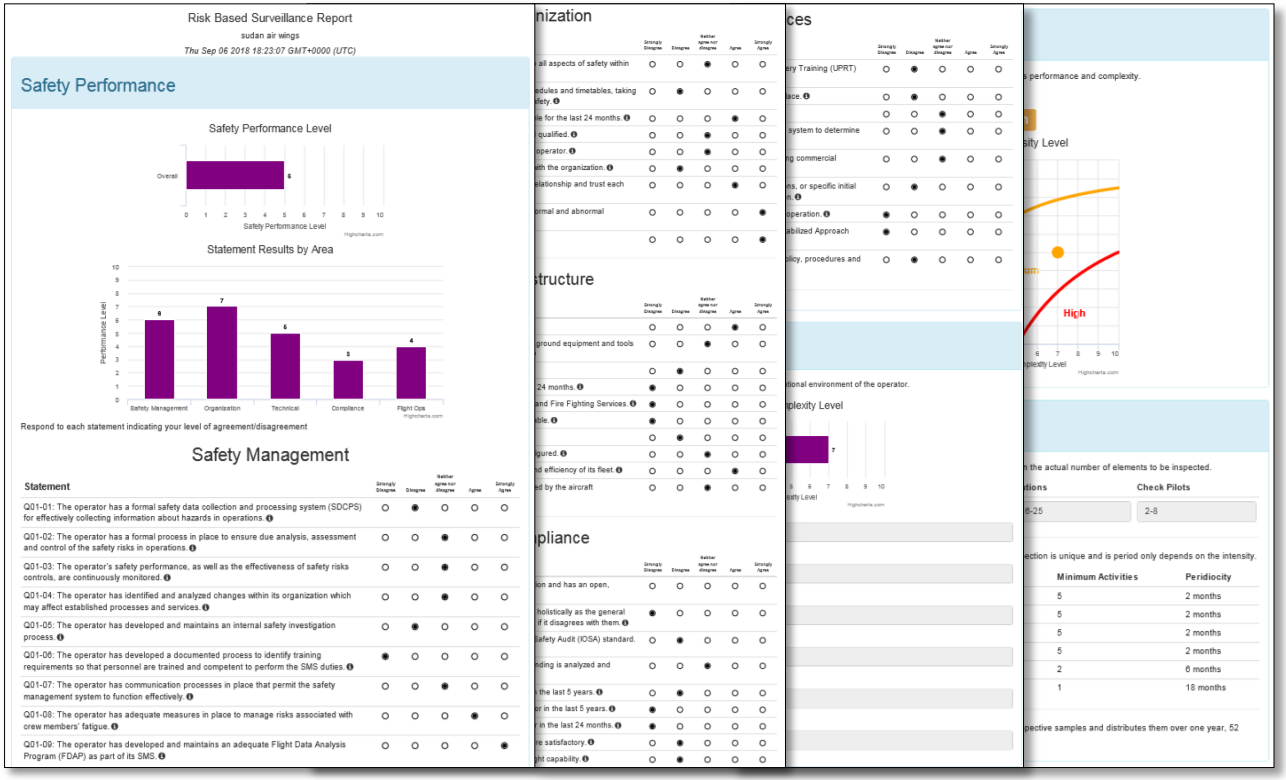
Risk-Based Surveillance Schedule

Operations

sudan air wings

Surveillance intensity: Medium

Quarter	Week	Base Y1	Base Y2	Base Y3	Route CAB	Route FB	Ramp	Station	Check Pilot
		Inspection Types							
Q1	1								
	2								
	3				•				
	4								
	5								
	6							•	
	7						•		
	8								
	9					•			
	10								
	11								
	12								
	13				•				
Q2	14								
	15								
	16	•						•	
	17						•		
	18								
	19					•			
	20								
	21								
	22								
	23				•				
	24								
	25								•
	26							•	
Q3	27						•		
	28								
	29					•			
	30								
	31								
	32								
	33								
	34				•				
	35								
	36								
	37							•	
	38						•		
	39								
Q4	40					•			
	41								
	42								
	43								
	44				•				
	45								
	46		•						
	47							•	
	48						•		
	49								
	50					•			
	51								•
	52								
Total		1	1	0	5	5	5	5	2



Risk Based Surveillance Report

sudan air wings

Thu Sep 06 2018 18:23:07 GMT+0000 (UTC)

Safety Performance

Safety Performance Level

Statement Results by Area

Respond to each statement indicating your level of agreement/disagreement

Safety Management

Statement	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Q01-01: The operator has a formal safety data collection and processing system (SDCPS) for effectively collecting information about hazards in operations.	○	●	○	○	○
Q01-02: The operator has a formal process in place to ensure due analysis, assessment and control of the safety risks in operations.	○	○	●	○	○
Q01-03: The operator's safety performance, as well as the effectiveness of safety risks controls, are continuously monitored.	○	○	●	○	○
Q01-04: The operator has identified and analyzed changes within its organization which may affect established processes and services.	○	○	●	○	○
Q01-05: The operator has developed and maintains an internal safety investigation process.	○	●	○	○	○
Q01-06: The operator has developed a documented process to identify training requirements so that personnel are trained and competent to perform the SMS duties.	●	○	○	○	○
Q01-07: The operator has communication processes in place that permit the safety management system to function effectively.	○	○	●	○	○
Q01-08: The operator has adequate measures in place to manage risks associated with crew members' fatigue.	○	○	○	●	○
Q01-09: The operator has developed and maintains an adequate Flight Data Analysis Program (FDAP) as part of its SMS.	○	○	○	○	●

nization

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
all aspects of safety within	○	○	●	○	○
edules and timetables, taking fety.	○	●	○	○	○
e for the last 24 months.	○	○	○	●	○
qualified.	○	○	●	○	○
operator.	○	○	●	○	○
ith the organization.	○	●	○	○	○
elationship and trust each	○	○	○	●	○
rmal and abnormal	○	○	○	○	●
	○	○	○	○	●

tructure

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	○	○	○	●	○
ground equipment and tools	○	○	●	○	○
	○	●	○	○	○
24 months.	●	○	○	○	○
and Fire Fighting Services.	●	○	○	○	○
ble.	●	○	○	○	○
	○	●	○	○	○
gured.	○	○	●	○	○
d efficiency of its fleet.	○	○	○	●	○
d by the aircraft	○	○	●	○	○

pliance

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
on and has an open,	○	○	○	○	○
holistically as the general f it disagrees with them.	●	○	○	○	○
afety Audit (IOSA) standard.	○	●	○	○	○
nding is analyzed and	○	○	●	○	○
the last 5 years.	○	●	○	○	○
or in the last 5 years.	●	○	○	○	○
in the last 24 months.	●	○	○	○	○
re satisfactory.	○	●	○	○	○
ht capability.	○	●	○	○	○

ces

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
ry Training (UPRT)	○	●	○	○	○
ace.	○	●	○	○	○
	○	○	●	○	○
system to determine	○	○	●	○	○
g commercial	○	○	●	○	○
ts, or specific initial n.	○	●	○	○	○
operation.	●	○	○	○	○
abilized Approach	●	○	○	○	○
olicy, procedures and	○	●	○	○	○

onal environment of the operator.

plexity Level

s performance and complexity.

sity Level

the actual number of elements to be inspected.

tions	Check Pilots
6-25	2-8

ection is unique and is period only depends on the intensity.

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5	2 months
5	2 months
2	6 months
1	18 months

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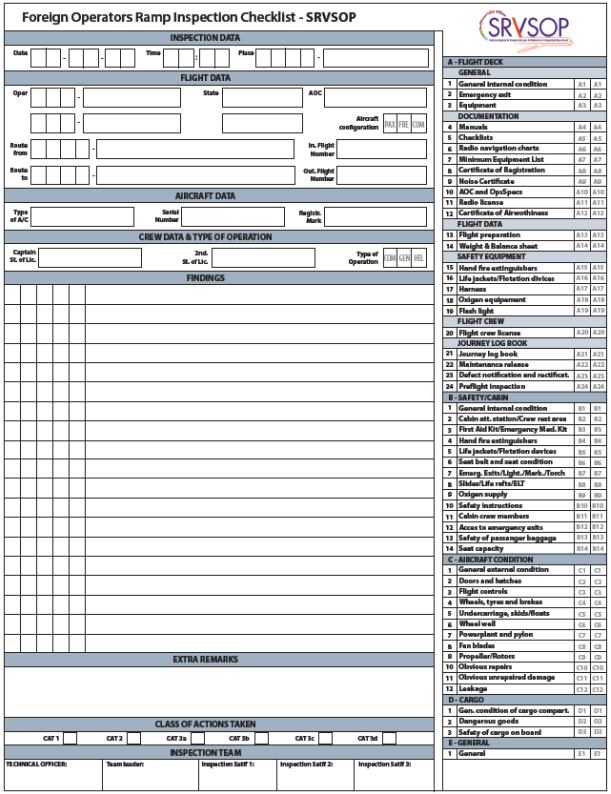


Foreign Operators Ramp Inspection Checklist - SRVSOP

SRVSOP

INSPECTION DATA

Date | Time | Place

FLIGHT DATA

Oper | State | AOC | Aircraft configuration (PAX FRE COM)

Route from | In. Flight Number

Route to | Out. Flight Number

AIRCRAFT DATA

Type of A/C | Serial Number | Regists. Mark

CREW DATA & TYPE OF OPERATION

Captain Sl. of Lic. | 2nd. Sl. of Lic. | Type of Operation (COM GEN HEL)

FINDINGS

EXTRA REMARKS

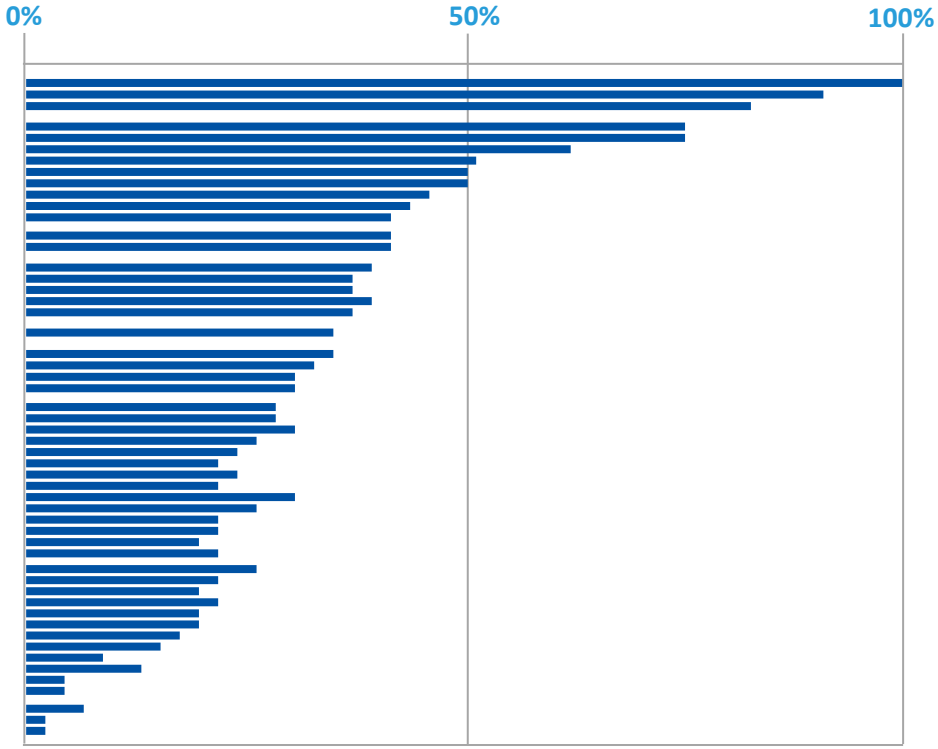
CLASS OF ACTIONS TAKEN

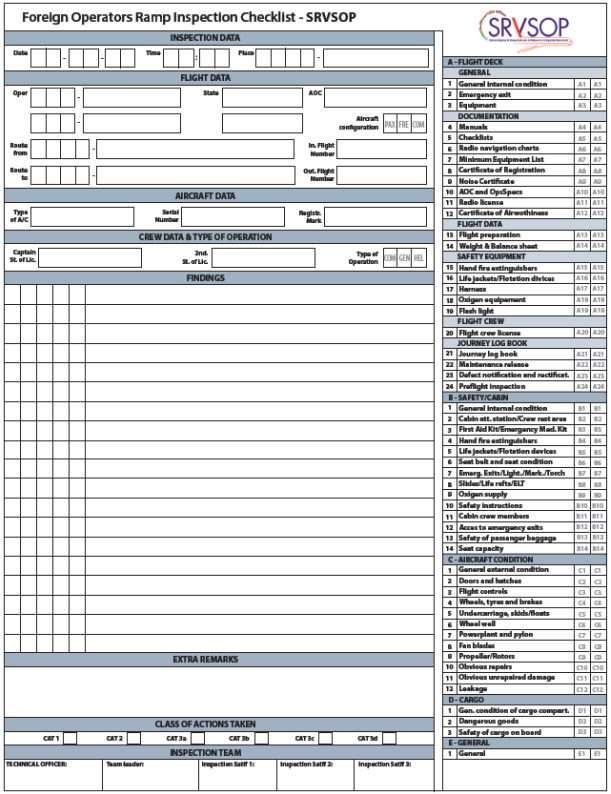
CAT 1 | CAT 2 | CAT 3a | CAT 3b | CAT 3c | CAT 3d

INSPECTION TEAM

TECHNICAL OFFICER:	Team leader:	Inspection Satff 1:	Inspection Satff 2:	Inspection Satff 3:

A - FLIGHT DECK			
	GENERAL		
1	General internal condition	A1	A1
2	Emergency exit	A2	A2
3	Equipment	A3	A3
	DOCUMENTATION		
4	Manuals	A4	A4
5	Checklists	A5	A5
6	Radio navigation charts	A6	A6
7	Minimum Equipment List	A7	A7
8	Certificate of Registration	A8	A8
9	Noise Certificate	A9	A9
10	AOC and OpsSpecs	A10	A10
11	Radio license	A11	A11
12	Certificate of Airworthiness	A12	A12
	FLIGHT DATA		
13	Flight preparation	A13	A13
14	Weight & Balance sheet	A14	A14
	SAFETY EQUIPMENT		
15	Hand fire extinguishers	A15	A15
16	Life jackets/Flotation divices	A16	A16
17	Harness	A17	A17
18	Oxigen equipament	A18	A18
19	Flash light	A19	A19
	FLIGHT CREW		
20	Flight crew license	A20	A20
	JOURNEY LOG BOOK		
21	Journey log book	A21	A21
22	Maintenance release	A22	A22
23	Defect notification and rectificat.	A23	A23
24	Preflight inspection	A24	A24
B - SAFETY/CABIN			
1	General internal condition	B1	B1
2	Cabin att. station/Crew rest area	B2	B2
3	First Aid Kit/Emergency Med. Kit	B3	B3
4	Hand fire extinguishers	B4	B4
5	Life jackets/Flotation devices	B5	B5
6	Seat belt and seat condition	B6	B6
7	Emerg. Exits/Light./Mark./Torch	B7	B7
8	Slides/Life rafts/ELT	B8	B8
9	Oxigen supply	B9	B9
10	Safety instructions	B10	B10
11	Cabin crew members	B11	B11
12	Acces to emergency exits	B12	B12
13	Safety of passenger baggage	B13	B13
14	Seat capacity	B14	B14
C - AIRCRAFT CONDITION			
1	General external condition	C1	C1
2	Doors and hatches	C2	C2
3	Flight controls	C3	C3
4	Wheels, tyres and brakes	C4	C4
5	Undercarriage, skids/floats	C5	C5
6	Wheel well	C6	C6
7	Powerplant and pylon	C7	C7
8	Fan blades	C8	C8
9	Propeller/Rotoes	C9	C9
10	Obvious repairs	C10	C10
11	Obvious unrepaired damage	C11	C11
12	Leakage	C12	C12
D - CARGO			
1	Gen. condition of cargo compart.	D1	D1
2	Dangerous goods	D2	D2
3	Safety of cargo on board	D3	D3
E - GENERAL			
1	General	E1	E1





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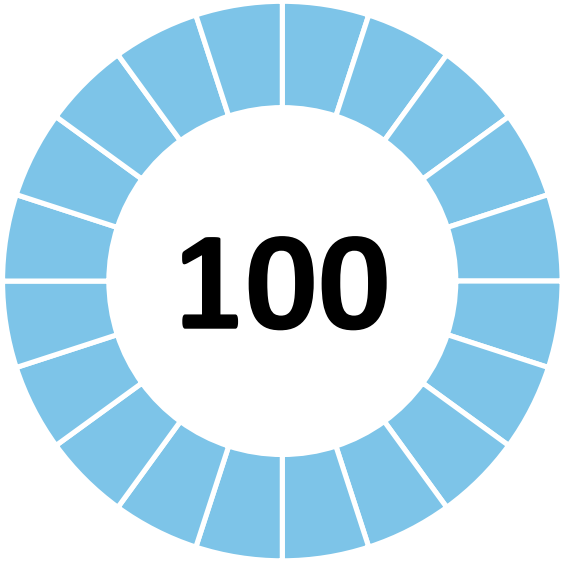

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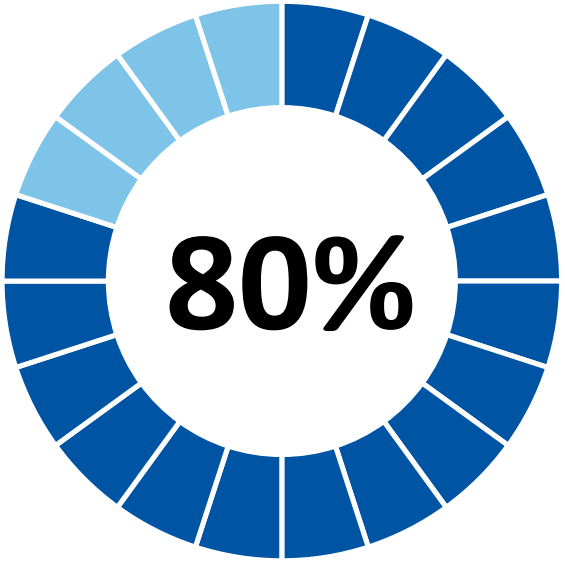

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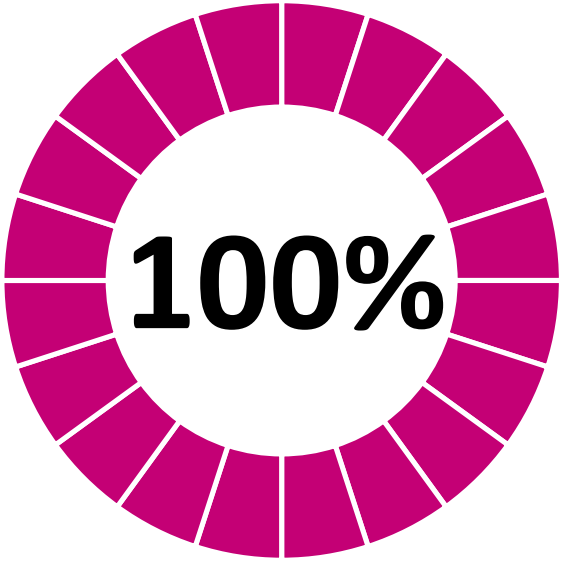

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