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INTERNATIONAL
CIVIL AVIATION
ORGANIZATION

DETECTION OF PERSONNEL NEEDS (SSP)

Imelda Bautista-Guerra

SSP Manager – Belize Department of Civil Aviation

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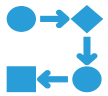
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Introduction

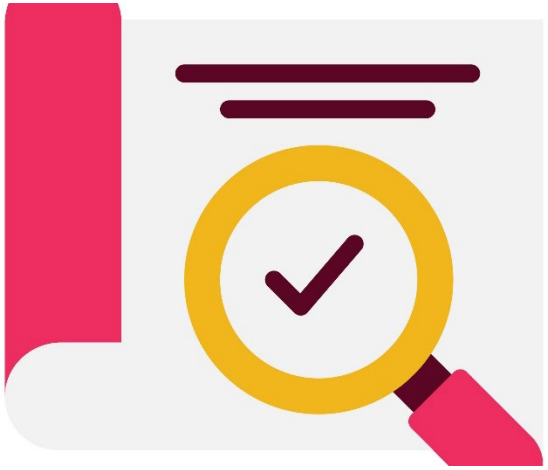


Introduction



OBJECTIVE

Establish a systematic approach for determining the necessary staffing levels for the SSP Unit. This approach will support safety and efficiency.



SCOPE

Covers all roles and responsibilities within the SSP Unit, ensuring comprehensive coverage of personnel requirements.

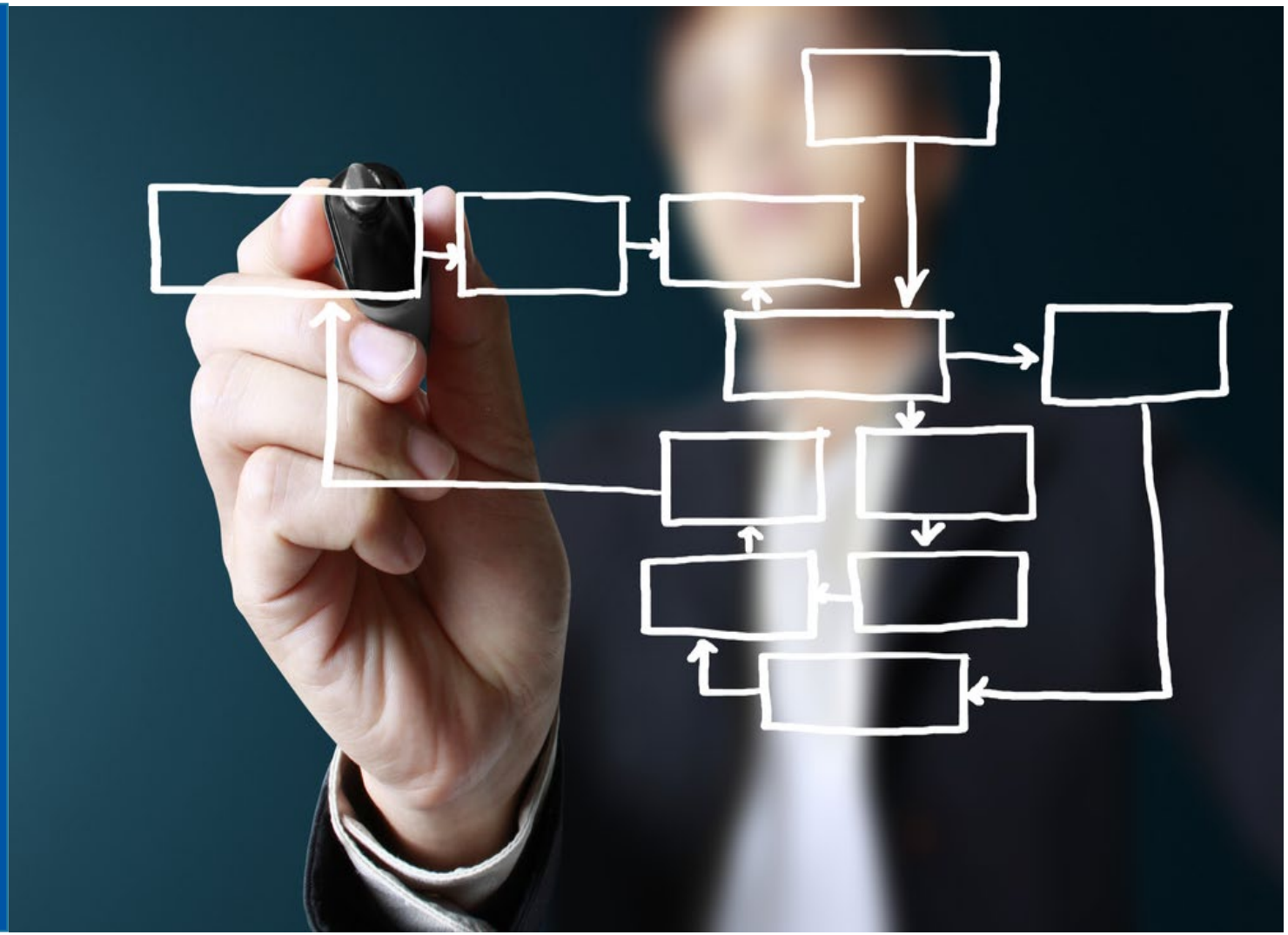


BENEFITS

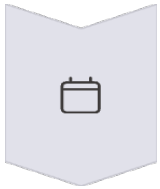
- Optimized resource allocation
- Enhanced safety oversight
- Improved programmes effectiveness

02

Procedure



Procedure



Determine Available Working Time

Calculate actual working days and hours available per staff member annually



Identify Required Activities and Parameters

List all SSP functions and estimate time required for each



Calculate Personnel Requirements

Divide total required hours by available hours per staff member



Document and Justify

Prepare formal documentation supporting personnel requirements



Implementation and Review

Recruitment, Training, Assignment, Periodic review

Step 1 – Determine the Available Working Time

Calculate actual working days and hours available per staff member annually



Identify Working Days

Start with total calendar days and subtract non-working periods



Calculate Available Time

Convert available days to working hours per staff member



Verify Calculations

SSP Coordinator confirms figures with Human Resources

Step 1 – Determine the Available Working Time

Annual Working Time Calculation – Example of Northwind Civil Aviation Authority

No. of days per year		**365**
Non-Working Days:		
Vacation	24	
Weekends	104	
Public & Bank Holidays	10	
Sick Leave	16	
Duty Leave	25	
Total Non-Working Days		(179)
Total Available Annual Working Days		186
Working Hours per day		6.5
Total Annual Available Time per inspector		**1209**

Step 2 – Identify Required Activities and Parameters

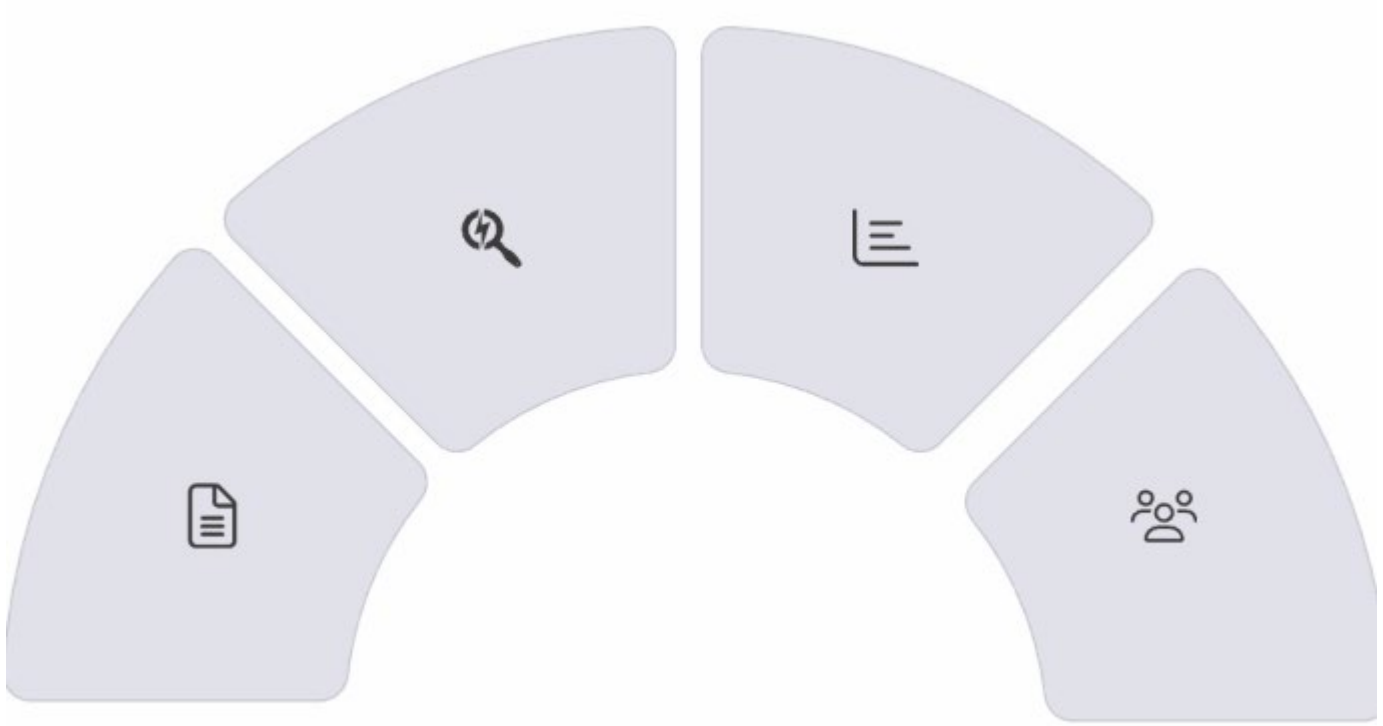
SSP functions and estimate time required for each

Safety Oversight

Inspections, audits, and compliance monitoring

Data Analysis

Safety performance indicators and trend analysis



Documentation Review

Safety reports, audits, and regulatory documents

Stakeholder Engagement

Industry coordination and safety promotion activities

Step 2 – Identify Required Activities and Parameters

Sources – References

- Annex 19 – Safety Management
- Document 9859 – Safety Management Manual
- SSPIA (Reference Only)
- USOAP CMA Protocol Questions 2024v – SSP/SMS
- Document 10053 – Manual on Protection of Safety Information
- Document 10159 – Safety Intelligence Manual (to be approved)
- Document 10161 – Global Aviation Safety Roadmap
- Document 10131 – Manual on the Development of Regional and National Aviation Safety Plans
- Document 10004 – Global Aviation Safety Plan (latest edition)
- State's SSP Manual
- Among others

Step 2 – Identify Required Activities and Parameters



Task Breakdown

Breaking down the activities of SSP unit into components/CE



Estimation

How much time each task takes



Planning

How often will those activities be executed annually

Step 2 – Identify Required Activities and Parameters

Example : Northwind Civil Aviation Authority

NORTHWIND CIVIL AVIATION AUTHORITY

Table for determination and methodology of SSP Techical Staff Needs at NCAA

Unit	Inspector	Activity	Type of Activity	Operator or Organization	Time used (hrs)	Annual Frequency of Activity	Total Technical Uptime (hrs)
SSP	SSP	Develop/Update SSP Gap Analysis	Component 1	CAA	32.5	2	65
SSP	SSP	Develop/Update SSP Implementation Plan	Component 1	CAA	65	4	260
SSP	SSP	Monitoring of SSP Implementation	Component 1	CAA	19.5	4	78
SSP	SSP	Revision/Update of Primary Law	Component 1	CAA	65	1	65
SSP	SSP	Development/Update of Safety Management Regulation	Component 1	CAA	65	1	65
SSP	SSP	Development of procedures & policies related to SSP/SMS	Component 1	CAA	65	3	195
SSP	SSP	Monitoring of procedures and policies related to SSP	Component 1	CAA	32.5	1	32.5
SSP	SSP	Development/Update of SMS Guidance Material and Checklists	Component 1	CAA	65	3	195
SSP	SSP	Development/Update of SSP Manual	Component 1	CAA	143	1	143

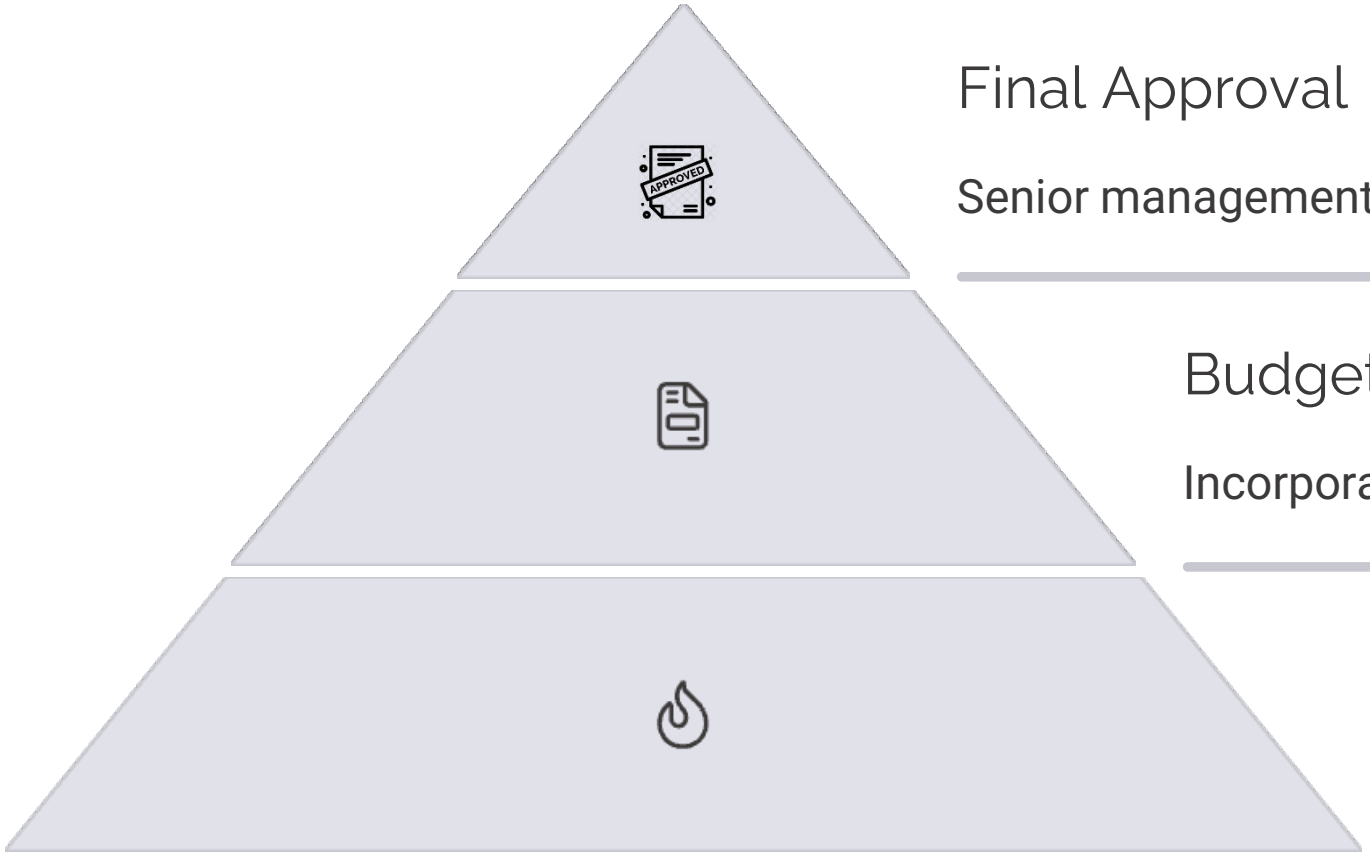
Step 3 – Calculate Personnel Requirements

Divide total required hours by available hours per staff member

Average Time Used	7186			
Total time required for one-time activities	2847			
Total new average time used (After deducting one-time activities)	4339			
Annual Available Time per inspector	1209			
Time Available After Use (Per Inspector)	-3130			
% Used Relative to Total Available	359%	**Required**	Staff Required	
Number of Inspectors Required - Approx	3.59			
Number of Inspectors available	1			
Number of Inspectors required	**2.59**			

Step 4 – Document and Justify

Prepare formal documentation supporting personnel requirements



Final Approval

Senior management authorization

Budget Integration

Incorporation into financial planning

Formal Documentation

Detailed justification report

Step 4 – Document and Justify

Brief Outline of Formal Report

- Introduction
  - Background, Objective, Scope
- Current Staffing Situation
- Workload analysis (DOP Needs Tool)
- Proposed personnel requirements
- Proposed training plan for new staff
- Recommendation
- Conclusion

Step 5 – Implementation and Review

Recruitment, Training, Assignment, Periodic Review



Recruitment

Hiring qualified personnel based on approved requirements

Training

Ensuring staff competency for SSP functions

Assignment

Distributing workload according to skills and capacity

Periodic Review

Reassessing staffing needs as SSP evolves

03

Detection of Personnel Needs Tool for SSP



Northwind Civil Aviation Authority

Synopsis of State

The Northwind Civil Aviation Authority (NCAA) currently employs a dedicated team of 50 professionals across various aeronautical technical areas, ensuring the smooth operation and safety of the state's aviation industry. Recently, the NCAA appointed a State Safety Programme Coordinator to establish and implement the state's SSP, aiming to enhance safety standards across all aviation activities. Employees enjoy a comprehensive benefit package, including 24 vacation days annually, 16 sick leave days, 10 public and bank holidays ensuring a healthy work-life balance while maintaining a high level of operational efficiency. For the year 2025, the SSP Coordinator is scheduled to attend four trainings as per training plan which sums up to 25 days of duty leave. NCAA has a total of 9 service providers that are required to establish and implement an SMS including air operators, approved maintenance organizations, airport operators, air navigation service provider, among others. NCAA is committed to establish a proper unit for the SSP and is therefore engaged in hiring the appropriate amount of personnel required to carry out all functions of SSP and be in compliance with ICAO SARPs.

NORTHWIND CIVIL AVIATION AUTHORITY

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SSP	SSP	Development/Update of SMS Guidance Material and Checklists	Component 1	CAA	65	3	195
SSP	SSP	Development/Update of SSP Manual	Component 1	CAA	143	1	143
SSP	SSP	Review of SSP PQ (CAP) - ICAO USOAP CMA Audits	Component 1-3	CAA	65	4	260
SSP	SSP	Monitoring of SMS (SMS surveillance)	Component 3	Operator/CAA	65	9	585
SSP	SSP	Monitoring the Initial SMS Assessment & Acceptance	Component 3	Operator/CAA	32.5	9	292.5
SSP	SSP	Monitoring SMS Acceptance Phase 1	Component 3	Operator/CAA	26	9	234
SSP	SSP	Monitoring SMS Acceptance Phase 2	Component 3	Operator/CAA	26	9	234
SSP	SSP	Guidance on how to determine indicators as a state	Component 3	Operator/CAA	32.5	1	32.5
SSP	SSP	Development/Update of NASP	NASP	CAA	286	1	286
SSP	SSP	Monitoring and Implementation of NASP	NASP	CAA	45.5	10	455
SSP	SSP	Annual Report of NASP	NASP	CAA	32.5	1	32.5
SSP	SSP	Triennial Report SSP (SDCPS)	Component 3	CAA	32.5	1	32.5
SSP	SSP	Safety Meetings with Industry	Component 4	Operator/CAA	4	4	16
SSP	SSP	Safety Committee Meetings	Component 4	CAA	4	10	40
SSP	SSP	SSP Budget Planning for the following year	Component 1	CAA	32.5	1	32.5
SSP	SSP	Other administrative work	Component 1	CAA	65	1	65
		TOTAL					**7186**

Instructions: 1) This table corresponds to the specific activities by each inspector, whether inspections, updating of regulations, manuals, certification and others that are considered necessary.
2) The type of activity corresponds to the components of the SSP and other activities associated with the SSP Unit (eg: NASP).
3) The Operator corresponds to the organization or company of the industry to which the activity is associated.
4) The annual frequency corresponds to the number of times that activity is carried out.
5) Do not fill in the box of % Technical Activity Time.

Average Time Used	7186		
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Annual Available Time per inspector	1209		
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% Used Relative to Total Available	359%	**Required**	Staff Required
Number of Inspectors Required - Approx	3.59		
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04

Individual Activity



Individual Activity

Give a brief description of your State's size and complexity. Apply steps 1 to 5 to determine the amount of personnel required in the SSP Unit.

Use the tool provided to identify the activities, hours required per activity, frequency of activity, and the total technical time required to execute all the functions.

Identify all the activities that requires a one-time execution and those that are recurrent throughout the years.

Provide results if you're required to hire more personnel or not. Prepare the formal report to be presented for approval with the proper justification.

Present your analysis and the report.

You have 1 hour 20 minutes to complete the task and 10 minutes to present (Total time allotted = 90 minutes)



Thank You!

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