

ALASKA SOFTWARE **CONFIGURATION TOOL**

STUDENTS: Grant Neuman, James Mann, Junhong Cai, Shahrzad Feghhi, Batina Shikhalieva

SUMMARY

- ASCT replaces the outdated Illustrated Parts Catalo with an accessible user-friendly web application.
- ASCT allows flexibility to maintain configurations and of use for technicians in determining correct softw aircraft.

FRONT END SUMMARY

- Technicians use the **technician portal** to find correct software configurations for uploading onto a aircraft
- Administrators and engineers use the **admin portal** to make changes to the software configurations that technicians will use to load onto the aircrafts



TECHNICIAN PORTAL

- Technician enters in: Fleet Type, Tail Number, Syste
- Technician *receives*: LRU Part Numbers (hardware Software Name, Software Part Number.
- Output is displayed in a table format for simplicity and access to information.
- Implemented with Angular JS.

ADMIN PORTAL

- Allows engineers to create, approve, modify, and au aircrafts configurations.
- New configuration is added in the Submit Change
- Any request must be approved in the Approve sect allows the information to be accessed by technician
- A request can be modified in the Modify/Delete se
- The history of changes can be audited in the Histor Change Log section.

ELECTRICAL & COMPUTER ENGINEERING

UNIVERSITY of WASHINGTON

	Alaska Airline Software	Configuration Technician Portal	BAC
og (IPC)	Boeing Airbus Undo		 A database was built to existence information for given airc An API was developed to 1
and ease vare for	Tail Number:	umber AS	including per Technicians
	System/LRU Name:	m/LRU Name	
	Fleet: Boeing Tail: 111AS System: ACP LRUPartNumber OPC 115E1670G18 2316BPS03	Submit OPS 3P05 2316BPS03P05	 Implemented with ASP.NE Utilizes Entity Framework database. Handles HTTP requests in Runs code first migration
	ACP, 111AS: This is a sample technician note! ACP, 111AS: This is another sample technician note!		AZU
	Create New Hardware/Software Item	Approver Email approver@alaskaair.com Please provide your AlaskaAir email address View Requests	 Implemented with SQL an Stores information about configurations used by Ala Connects with TRAX DB to configuration status.
em Name. box), d easy	Tail Number(s) 402AS, 224AS System Name System Name FMC	Request Time: Tue May 26 2020 20:00:49 GMT-0700 (Pacific Daylight Time) Request Type: add Tail Numbers: 402AS,224AS System Name: FMC Submitted By: requester@alaskaair.com Fleet: Boeing EC Number: none Show/Hide Request Info System Name: FMC Status: none Accept Request LRU Number: 176200-01-01 Authorization Document: Deny Request Software Name: MEDB referenceManual.pdf Authorization Notes: Deny Request	ASCT Data
	LRU Part Number 176200-01-01 Software Name MEDB Software Part Number BCG01TA0 Technician Notes	Add or Remove Tail Numbers	REST API ASCT API
udit new	Notes for Technician poster example // EC Information	Fleet Boeing Sub-Fleet 737-900ER Tails to Add 224AS Add to Submission List	ASCT Portal
section. tion. This ns. ection. cical		Remove Tail Numbers Tails to Delete Add to Submission List Your addition/removal of tail numbers has been submitted Clear Tail List	 Further implementation of service between ASCT db ar TRAX db Integration of Alaska Airline authentication

ADVISORS: KEVIN HRUZA, DAMON ZIRKLER, COLLEEN PIPER, DEREK CHAN

SPONSORS: Alaska Airlines





KEND SUMMARY

xtract the specific configuration craft Tail Number and System Name. fetch aircrafts configuration information or/and Administrator request.

API

ET Core 3.0. Core to connect with the Azure

ncluding GET, POST, and PUT. to update the design of the database.

JRE DATABASE

nd hosted on Azure. all aircrafts and their software laska Airlines. o get the latest updates about



Faculty Mentor: Payman Arabshahi Industry Mentors: Mohammad Ali, Lisa Roderiques

es SSO