



Part 117 at Southwest Airlines

- Trip and Line construction buffers
- Contractual Buffers on Pilot transactions
- Crew Management System CSS/CWA
- SkySolver-real time alerting and problem solution tool
- Part 117 Report
- ACARS messages
- CMO issues
 - FDP extensions
 - Unforeseen and within Southwest's control
 - Part 121 fuel planning requirements and foreseen circumstances
 - Part 117 reporting
- Part 117 during severe IROPS

117.5 Fitness for Duty

- Domestic Dispatch Release
Flight 733 from MDW to PHX

ENROUTE:	APU	ENG A/I				
ENROUTE (METHOD 1)	NORM	ON				
SEGMENT		TERRAIN	OVRWGT	WT	ALT	
NO LIMITING TERRAIN				154.5	NONE	

DSP: DX - T.B.A.	DESK: 19 PH: 214-792-6121//800-447-9291
CAP: CA - T.B.A.	SIGNATURE: _____

----- FITNESS FOR DUTY STATEMENT -----

EACH CREWMEMBER AFFIRMATIVELY STATES HE OR SHE IS FIT FOR DUTY IN ACCORDANCE WITH 14 CFR PART 117.

CAP: CA - T.B.A.	SIGNATURE: _____
F/O: FO - T.B.A.	SIGNATURE: _____

XXXXXXXXXXXXXXXXXXXXXXXXXXXX END OF RELEASE XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Trip and Line Construction Buffers

- Table A less 25 minutes
- Table B less 60 minutes for AM trips
- Table B less 120 minutes for PM trips
- 11:30 planned minimum rest between duty periods and between trips.
- Max of three WOCL incursions per trip
- Max of 95 hours of planned block per line

Contractual Buffers on Pilot Transactions

- Define what a Pilot can schedule.
 - Table A less 30 minutes
 - Table B less 90 minutes
 - 55 FDP hours in 168
 - 182 FDP hours in 672
 - 98:30 in block time in 672
 - 998 in block time in 365
 - 11 hours of rest between FDPs
 - 31 hours of rest in 168.

Crew Management System CSS/CWA

Real time operational updates for the entire day.

(PLT)CSS Client 36 prod - Automation - Default Desktop - Trip Details-BP3M dated 05Jan20

Settings Crews Trips Flights Open Time Reports Training Payroll Monthly Bidding SkySolver Window

JAN20 [Icons]

Crew Member Schedule - 74804 TURVOLD TYLER *CKAM* *INTL*FP*

Trip Details-BP3M dated 05Jan20

Emp ID: [] Name: [] Sic: [] O: [] Commute: [] FDP in 1: [] 0:0

General: [] Reserve: [] Notify: []

1 Jan 20 [] CX []

15 []

29 [] GDO []

Mod []

(C) Duty time of 13:12 hours exceeds the max scheduled Duty Period of 12:00 hours at 0440 on 06Jan20
(B) FDP of 12:42 hours exceeds 10:30 hours of maximum FDP at 1722 on 06Jan20
(F) FDP of 12:42 hours exceeds maximum FDP of 12:00 hours by more than 30 minutes at 1722 on 06Jan20
(F) FDP of 12:42 hours exceeds 12:00 hours of maximum FDP at 1722 on 06Jan20

Remarks [] Status Class Type

CA Advised 1645C LWMU

ACCL/LPA: 74804 CA [] A [] BVM [] FO []

Date	Flight	Depart	Arrive	Eq	Pos	S	Leg Code	Intl	MT	Grnd	Block	FDP	Duty	Credit	CT
Rpt 0415															
05Jan	2984	BVM	0515	TPA	0738	700				43	223			290	0
05Jan	2989	TPA	0821	ISP	1102	700				1808	241			304	
Ris 1132												504	647	717	594

Projected Duty Values: 647 717

ISP :1708 Hotel: Hyatt Regency Long Island, 1-631-784-1234 Trans: Hotel Shuttle

Contact Time: CA [] FO []

ACCL/LPA: 74804 CA [] A [] BVM [] FO []

Date	Flight	Depart	Arrive	Eq	Pos	S	Leg Code	Intl	MT	Grnd	Block	FDP	Duty	Credit	CT
Rpt 0440															
06Jan	915	ISP	0510	BVM	0627	700				110	117			150	
06Jan	1593	BVM	0737	BOS	0854	700				103	117			190	
06Jan	826	BOS	0957	BVM	1128	700				113	131			190	
06Jan	826	BVM	1241	BVM	1319	700	GR			318	38			76	
06Jan	826	BVM	1637	BVM	1705	700	GR			17	28			56	
06Jan	FDP	BVM	1722	BVM	1722					0	0			0 F	
Ris 1752												511	1242	1312	977 D

Projected Duty Values: 1242 1312

Pairing Mission Type: Non-ETOPS

Time Away From Base: 3737

Pairing Total: 1015 1929 2029 1571 []

Original Previous: BP3L dated 05Jan20

MOT/DOT/HOT 1571

PREM 1884

Crew Members

Emp ID	Employee Name	Pos	Sen	Group	Lbl	Ck'd in	Not'd	Aud'd	Orig
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SkySolver

- Alerting and solutions for the most restrictive of the CBA or FARs.

SkySolver (PLT) v.36 prod - Automation

Parameters Filter Solution Help

SkySolve ☐ Return One Solution ☐ Save Debug Information

SASI Status
Last Data Publish Time: 01/15/2020 08:18:00
Last Actual Flight Time: 01/15/2020 08:17:00

Scope Hidden Protections Preferences Parameter Overrides What-If MT / CAT3

Current Problems

There are 10 Problems.

Date	Type	CrewId	Trip	Flight	ORG	DEST	Problem Type	Problem Description
15Jan20 04:25	FO	60875	AP1S/15	478	ATL	STL	No Show	ATL STL
15Jan20 06:00	CA	49190	HP1Z/15	4835	HOU	DEN	No Show	HOU DEN
15Jan20 06:00	FO	81197	HP22/15	4835	HOU	DEN	No Show	HOU DEN
15Jan20 08:00	CA	59218	OAEV/15	1495	OAK	LAS	No Show	OAK LAS
15Jan20 15:21	CA	66352	MAOX/13	320	LAS	MDW	Block	Block time of 08:44 is within 24 minutes of max flight time limit of 09:00.
15Jan20 15:21	FO	88213	MAOX/13	320	LAS	MDW	Block	Block time of 08:44 is within 24 minutes of max flight time limit of 09:00.
15Jan20 16:10	CA	35980	DP1E/15	927	DAL	AUS	Rest	Rest of 00:10 is less than the 10:00 required.
15Jan20 17:05	FO	117305	DP1X/15	3667	DAL	BNA	Duty	Caution - (Contract) Reserve crew release within 60 minutes of 15:00 hour limit 117305 DP1X
15Jan20 18:00	FO	115640	CAKL/15	1689	STL	LAX	Duty	Caution - (Contract) Reserve crew release within 60 minutes of 15:00 hour limit 115640 CAKL
16Jan20 16:15	CA	44648	MP1E/16				Rest	Rest of 00:10 is less than the 10:00 required.

Filter Time Search Misconnect

Positions
☒ CA ☒ FO ☐ FA

Sub-Positions
☐ FAA ☐ FAB ☐ FAC ☐ FAD

☐ Domestic ☐ International ☐ ETOPS

Problem Type

	Block	Duty	FDP	Rest	Training
Legality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Caution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Warning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Commuter ☐ Discontinuity
☐ Open ☐ Misconnect
☐ Uncovered ☐ Overcovered

Base
☐ ATL ☐ BWM ☐ DAL ☐ DEN
☐ HOU ☐ LAS ☐ LAX ☐ MCO
☐ MDW ☐ OAK ☐ PHX

Station
Origin Destination

Current Problem Scope

Tasks:

+/-	Task ID	Description	Status	Start Time	Elapsed Time
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Part 117 Block and FDP Limitations Report

- Presented to the Crew prior to departure.

Part 117 block/FDP Limits for Flight 4036 DAL - BWI on 12/21/2015 as of 03/01/2016 18:58Z			
Captain:			
First Officer:			
Is your Takeoff time limited by MTO or LWU for this Leg?			
Crew Max Taxi Out (MTO) - Block Time Limitation (Out to OFF):	Limit	Reason	Limiting Crewmember
Maximum taxi time to ensure block in at destination is within flight time limitations			
Amount of Taxi time available prior to takeoff:	06:31	Table A	CA/FO
Crew Latest Wheels Up (LWU) - Limited by Flight Duty Period (FDP):	Limit	Reason	Limiting Crewmember
Latest wheels up time to ensure block in at destination is within FDP limitations			
Without FDP Extension, you must Takeoff by:	1431 C 2031 Z	Table B	CA/FO
With FDP Extension, you must Takeoff by:	1531 C 2131 Z	CBA Duty	FO
* PIC concurrence required			

Part 117 Block and FDP Limitations Report

- The Crew is within one hour of a limit

APPROACHING PART 117 LIMIT

Part 117 block/FDP Limits for Flight 667 DAL - MCI on 12/21/2015 as of 02/18/2016 16:17Z

Captain: I

First Officer:

Is your Takeoff time limited by MTO or LWU for this Leg?

Crew Max Taxi Out (MTO) - Block Time Limitation (Out to OFF):	Limit	Reason	Limiting Crewmember
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Maximum taxi time to ensure block in at destination is within flight time limitations

Amount of Taxi time available prior to takeoff:	07:46	Table A	CA/FO
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Crew Latest Wheels Up (LWU) - Limited by Flight Duty Period (FDP):	Limit	Reason	Limiting Crewmember
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Latest wheels up time to ensure block in at destination is within FDP limitations

Without FDP Extension, you must Takeoff by:	1546 C 2146 Z	Table B	CA/FO
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With FDP Extension, you must Takeoff by:	1716 C 2316 Z	CBA Duty	CA
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* PIC concurrence required

ACARS messages

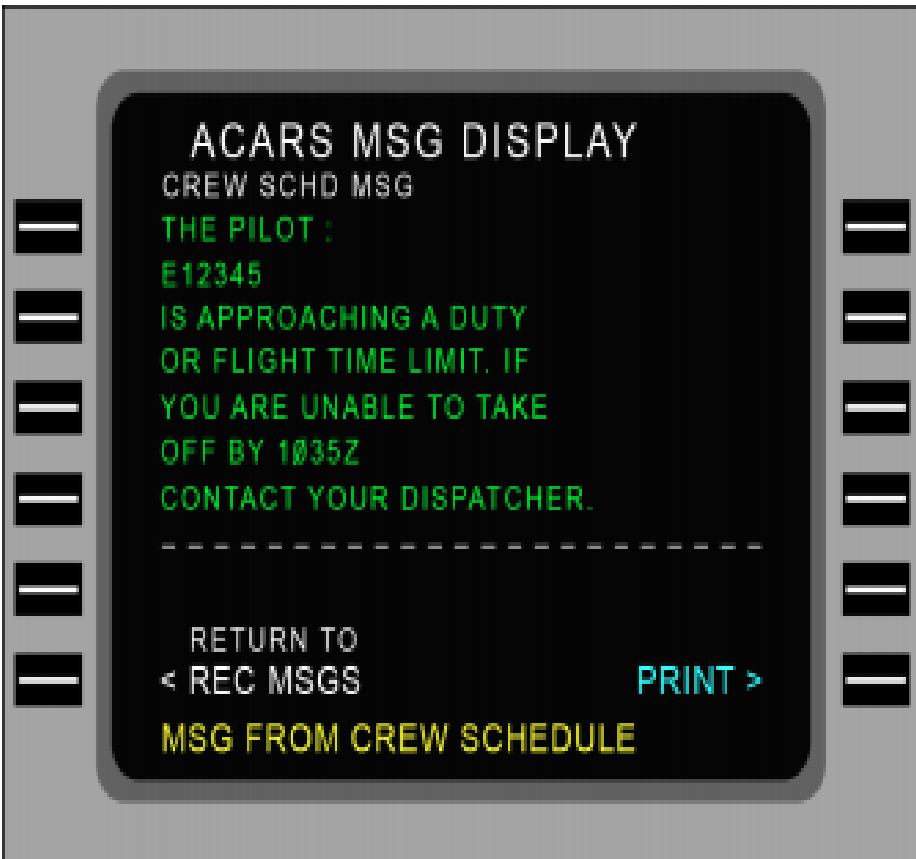
ACARS-PIC concurrence with FDP extensions

```
ACARS  FDP EXT MSG
      E91065
      WITH MAX EXT AVAIL
LATEST OFF TIME: 2035Z
LATEST IN TIME: 2130Z
PROJ EXT  0:05 / AVAIL
2:00
PIC ACCEPT OR REJECT?

  DATALINK          DATALINK
<ACCEPT            REJECT>

<RETURN
```

ACARS messages



CMO interpretations

- Pre-takeoff extensions cannot subsequently exceed two hours after takeoff.
 - Minimize the number of pre-takeoff extensions.
 - If it's more than 30 minutes to the new ETD and Crew Scheduling can replace the Crew, they will.
 - If it's less than 30 minutes to the new ETD, the extension is allowed to proceed.
- If an extension is projected to be 60 minutes or more, Crew Scheduling will work with Dispatch to ensure the flight will terminate within the two hour extension.

CMO interpretations

- Unforeseen circumstances and within the Carrier's control.
 - Most circumstances such as weather, ATC, ramp congestion and upline delays are now deemed "foreseen".
 - Pre-takeoff extensions have been recently deemed within our control as well. "You can bring the flight back to the gate and replace the Crew."
- Post takeoff flight time exceedances and FDP extensions are frequently deemed foreseen circumstances if the Dispatch Release contained contingency and holding fuel. "You knew you were going to have to hold over BWI."

CMO issues

- In 2019 our POI has generated:
 - One LOI
 - 17 Corrective Action Letters
 - Two General Letters
 - 30 RFIs
 - 42 emails requesting additional info

Part 117 during severe IROPS

Between Planning Buffers, CBA buffers, real time updates, systems, info shared with Crews and lots of proactive coordination with Dispatch, Part 117 is generally manageable.