FAA/TC/ICAO PILOT: SIM 1

OVERVIEW

This lesson, starting at KTEB (Teterboro, NJ) and concluding at KJFK (Kennedy Intl, NY), is designed to provide the pilot with the opportunity to accomplish normal flight operations and in-flight maneuvers in the Challenger 605 aircraft.

OBJECTIVES

Upon completion of this session the pilot should be able to understand and operate the aircraft systems and perform the maneuvers/profiles detailed below (Training Events) under fair-weather day conditions. The pilot will be able to understand the RAAS system under different phases of flight conditions. Black cockpit to be perform when acting as crew. Time divided between SIM1 A 2.5 hours and SIM1B 1.5 hours.

COMPLETION STANDARD

The session is complete when the pilot accomplishes the tasks listed in the content with the use of the cockpit checklists with minimum assistance from the instructor. The pilot shall also demonstrate the ability to operate the aircraft within the tolerances specified in reference manuals.

TRAINING EVENTS

- Cockpit setup (Black cockpit check)
- Engine Start Malfunctions/Abnormal
- Taxi with RAAS system
- Take-off procedures and Departure
- TCAS event
- Steep Turns
- Stall Recognition and Recovery, Clean, Take-off, Landing configuration with Autopilot ON and Off
- Unusual Attitudes/Upset Recoveries
- Energy and Flightpath Management
- Buffet Recognition
- FMS Flight Plan Deviation technique/Offset
- Weather Radar operation
- STAR
- Holding
- ILS Approach / 3D (ILS) Approach – AP On
- Two engines missed Approach
- VFR Traffic Pattern, T/O, Landing, Full Stop with crosswind
- Landing procedures
- After Landing, Shutdown & Securing Checks

MALFUNCTIONS

1. START MALFUNCTIONS
2. ADG DEPLOYMENT

REFERENCE MATERIAL

1. KTEB – Airport diagram
2. KTEB – TEB __departure
3. KJFK – Airport diagram
4. KJFK – LENDY __ arrival
5. KJFK – ILS RWY 31R

MANUALS

1. FCOM 1 & 2
2. QRH 1 & 2
3. MMEL/DDG
4. ATP – ACS
5. Pilot Skills List (PSL)

FAA/TC/ICAO PILOT: SIM 1

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	KTEB (Elev 8')
DEST	KJFK (Elev 13')
POSITION	ATLANTIC FBO
DEP RWY	19
FPL ALTITUDE	14000 Ft
FLIGHTPLAN	KTEB RWY 19 TEB# Dep BREZY CMK V374 DENNA BDR PAWLING # ARR KJFK

WEATHER

	KTEB	KJFK
TIME OF DAY	Day	Day
WIND	240/10	360/10
VISIBILITY	15SM	15SM
CLOUDS	SCT050	BKN050
TEMP/DPT °C	15/05	12/03
ALTIMETER	29.87	29.88
RUNWAY	ILS19 DRY	ILS 31R DRY
REMARKS	Day, Storm Cell WX in vicinity of DENNA	

AIRCRAFT WEIGHTS & CONFIGURATION

BOW	27500
PAX + CARGO (LB)	400 + 50 = 450
ZFW (LB)	27950
FUEL (LB)	9700
TOW (LB)	37450 (taxi burn 200lb)
ZFW CG %	26 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE OFF			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	
VFTO		**TRIM**	

FAA/TC/ICAO PILOT: SIM 2

OVERVIEW

This lesson, starting at KJFK (Kennedy Intl, NY),) and concluding at KJFK (Kennedy Intl, NY), is designed to provide the pilot with the opportunity to accomplish normal flight operations and in-flight maneuvers in the Challenger 605 aircraft.

OBJECTIVES

Upon completion of this session the pilot should be able to understand and operate the aircraft systems and perform the maneuvers/profiles detailed below (Training Events) under marginal cold weather conditions.

COMPLETION STANDARD

This session is complete when the pilot accomplishes the tasks listed in the content with the use of the cockpit checklists with minimum assistance from the instructor. The pilot shall also demonstrate the ability to operate the aircraft within the tolerances specified in in reference manuals.

TRAINING EVENTS

- Cockpit Setup (Before Start check)
- Engine Start Malfunctions/Abnormal
- Taxi – Nosewheel Steering Fail
- Runway Incursion Awareness
- Takeoff crosswind (Cold Weather Ops)
- Departure / Takeoff stall
- EFIS Reversions/IRS-ADC Fail
- High altitude handling, Dutch roll
- High Altitude Stall /Stick pusher
- Upset recovery (75% max certified alt)
- Pressurization/Emergency descent
- Arrival/Diversion/Contingency Ops
- Holding/Inadvertent flight icing
- Contaminated stall
- LOC or VOR/3D (LNAV/VNAV) Appr Hand flown
- Balked / Rejected Landing
- Missed Approach
- 3D (ILS) FD&AP OFF
- One engine failure and handling demo
- Landing

MALFUNCTIONS

1. START MALFUNCTIONS
2. GENERATOR FAILURE
3. AFCS AND FD OPERATION
4. PFD / MFD REVERSIONS
5. FUEL (DUMPING)
6. PRESSURIZATION
7. POWER PLANT FAILURE/SINGLE ENGINE HANDLING/RELIGHT (TIME PERMITTING)

REFERENCE MATERIAL

1. KJFK – Airport diagram
2. KJFK – LENDY __ arrival
3. KJFK – ILS RWY 31R

MANUALS

1. FCOM 1 & 2
2. QRH 1 & 2
3. MMEL/DDG
4. ATP – ACS
5. Pilot Skills List (PSL)

FAA/TC/ICAO PILOT: SIM 2

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	KJFK (Elev 13')
DEST	KJFK
POSITION	GENA
DEP RWY	31R
FLIGHTPLAN	KJFK RWY 31R JFK 5 DEP CRI Climb SATES MANTA SHERL BOUNO SATES KJFK

WEATHER

TIME OF DAY	NIGHT
WIND	360/15KT
VISIBILITY	5SM HZ
CLOUDS	OVC008
TEMP/DPT °C	04/03
ALTIMETER	29.72
RUNWAY	ILS 31R - WET
REMARKS	Night, tops 6000, Upper layer 20000-21000

AIRCRAFT WEIGHTS & CONFIGURATION

BOW	27114
PAX + CARGO (LB)	0
ZFW (LB)	27500
FUEL (LB)	12000
TOW (LB)	38914 (taxi burn 200lb)
ZFW CG %	33 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE ON, WET			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	
VFTO		**TRIM**	

FAA/TC/ICAO PILOT: SIM 3

OVERVIEW

This lesson, starting at KSEA (Seattle), and concluding at KSEA (Seattle) is designed to provide the customer with the opportunity to accomplish night flight operations in icing conditions and in-flight maneuvers in the Challenger 605 aircraft. Training Area of Special emphasis are in **BOLD**.

OBJECTIVES

Upon completion of this session the pilot should be able to understand and operate the aircraft systems and perform the maneuvers/profiles detailed below (Training Events) under IFR cold weather conditions.

COMPLETION STANDARD

The simulator detail is satisfactorily completed when the pilot has demonstrated to the instructor that they have assimilated the knowledge and skills necessary to operate the aircraft safely and efficiently. The pilot shall also demonstrate the ability to operate the aircraft within the tolerances specified in reference manuals.

TRAINING EVENTS

- Cockpit Setup (Before Start check)
- Engine Start
- Cold weather ops
- Rejected Takeoff
- Engine Failure at/after V1
- Instruments Takeoff
- Holding/Engine relight procedure.
- LPV (AP ON)
- OEI ILS (hand flown)
- SE Missed Approach
- SE Landing
- **Windshear Escape**
- **No Flap Appr & Visual Landing**
- **Flight controls abnormal/emergency**
- CFIT
- Emergency evacuation

MALFUNCTIONS

1. START MALFUNCTIONS
2. ENGINE FAILURE & FIRE
3. THRUST REVERSER DEPLOY
4. **FLIGHT CONTROL JAM**
5. DUAL HYDROLIC FAILURE (IF TIME PERMIT)
6. **FLAPS FAIL**
7. ATS FAILURE
8. ANTI-ICE/DE-ICE
9. TIRE FAILURE
10. BRAKE FIRE

REFERENCE MATERIAL

6. KSEA – Airport diagram
7. KSEA – MONTN __departure
8. KSEA – ILS RWY 34R
9. KSEA – RNAV GPS Y RWY 34C

MANUALS

6. FCOM 1 & 2
7. QRH 1 & 2
8. MMEL/DDG
9. FCL Appendix 9 Section B
10. Pilot Skills List (PSL)

FAA/TC/ICAO PILOT: SIM 3

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	KSEA (Elev 432')
DESTINATION/ALTERNATE	KPDX (Elev 31')
POSITION	Hold short of RWY 34R
DEPARTURE RWY / SID	16C / MONTN 2
ROUTE / FPL ALTITUDE	16C / MONTN 2 CLIMB VIA SID EXCEPT MAINTAIN 5000'

WEATHER	**DEPARTURE**	**ARRIVAL**
TIME OF DAY	DAY	DAY
WIND	220/15kt	290/15kt
VISIBILITY	0.5 sm FZFG	6 sm
CLOUDS	OVC006	OVC008
TEMP/DPT °C	M05/M07	M04/M09
ALTIMETER	29.62	29.66
RUNWAY	ILS 16C	ILS 28R
REMARKS	Tops 3,500 ft, RWY DRY, turbulence & icing light	DRY

AIRCRAFT WEIGHTS & CONFIGURATION

BOW (LB)	27114
PAX + CARGO (LB)	400 + 300
ZFW (LB)	27814
FUEL (LB)	11000
TOW (LB)	38614 (taxi burn 200 lb)
ZFW CG %	32 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE ON			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	
VFTO		**TRIM**	

FAA/TC/ICAO PILOT: SIM 4

OVERVIEW

This lesson, starting at MMTO (Toluca, Mexico) and concluding at KMEM (Memphis, USA), is designed to provide the pilot with the opportunity to accomplish high altitude flight operations and in-flight maneuvers in the Challenger 605 aircraft.

OBJECTIVES

Upon completion of this session the pilot should be able to understand and operate the aircraft systems and perform the maneuvers/profiles detailed below (Training Events) under high altitude and hot temperature conditions. Operations will be at or near the maximum weight for the takeoff configuration considering temperature and airport altitude.

COMPLETION STANDARD

This session is complete when the pilot accomplishes the tasks listed in the content with the use of the cockpit checklists with minimum assistance from the instructor. The pilot shall also demonstrate the ability to operate the aircraft within the tolerances specified in reference manuals.

TRAINING EVENTS

- Cockpit Setup (Before Start Check)
- Engine Starts
- Takeoff at MGTOW
- Rejected Takeoff
- Engine failure above V1 & V2
- OEI holding
- OEI 3D (LNAV/VNAV) approach
- OEI missed approach
- OEI landing
- Circling
- Rejected Landing
- 2D (LOC or VOR) Approach
- Landing pitch mis-trim
- Emergency evacuation

MALFUNCTIONS

1. START MALFUNCTIONS
2. FUEL LEAKS
3. DUAL HYDRAULIC FAILURE (MANUAL GEAR EXTENSION)
4. POWER PLANT FAILURE/SINGLE ENGINE HANDLING/RELIGHT

REFERENCE MATERIAL

1. MMTO – Airport diagram
2. MMTO – TOLUCA_ departure
3. MMTO – ILS DME1 RWY 15
4. MMTO – RNAV GNSS Y RWY 15

MANUALS

1. FCOM 1 & 2
2. QRH 1 & 2
3. MMEL/DDG
4. ATP – ACS
5. Pilot Skills List (PSL)

FAA/TC/ICAO PILOT: SIM 4

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	MMTO	KMEM
DEST	MMTO	KMEM
POSITION	Taxi	Threshold
DEP RWY	Rwy 33	Rwy 18R BBKNG7
FLT PLAN ALT	18 000’	
FLIGHTPLAN	MMTO Rwy 33 SEBON 1D departure MMTO	KMEM RWY 18R BBKNG 7 KERMI

WEATHER	**MMTO**	**KMEM**
TIME OF DAY	NIGHT	NIGHT
WIND	00000	090/10kt
VISIBILITY	1SM	6km BR
CLOUDS	OVC006	OVC010
TEMP/DPT °C	20/20	03/00
ALTIMETER	3032	QNH 1000
RUNWAY	WET	WET
REMARKS	Night, tops 11,000, turbulence light	Tops 3,500 ft, 1/8-inch water, Turbulence light

AIRCRAFT WEIGHTS & CONFIGURATION

BOW	27114
PAX + CARGO (LB)	200 + 100
ZFW (LB)	27414
FUEL (LB)	11886
TOW (LB)	39100 (taxi burn 200lb)
ZFW CG %	32 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE OFF			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	
VFTO		**TRIM**	

TC PILOT: SIM 5

OVERVIEW

This lesson, starting at CYUL (Trudeau Intl, QUE), and concluding at CYOW (Ottawa, ONT), is designed to provide the pilot with the opportunity to accomplish normal flight operations and in-flight maneuvers in the Challenger 605 aircraft.

OBJECTIVES

Upon completion of this session the pilot should be able to understand and operate the aircraft systems and perform the maneuvers/profiles detailed below (Training Events) under IFR cold weather conditions. This session is dedicated to items not completed due to time constraint in previous details.

COMPLETION STANDARD

This session is complete when the pilot accomplishes the tasks listed in the content with the use of the cockpit checklists with minimum assistance from the instructor. The pilot shall also demonstrate the ability to operate the aircraft within the tolerances specified in in reference manuals.

TRAINING EVENTS

- Engine Start/Malfunction
- FMS programming/AUTO-INHIBIT
- Taxi – Runway incursion awareness
- Take-off stall
- TCAS Event
- Stall Recognition, Recovery, Prevention
- Upset Recoveries
- Holding
- RNAV/3D (ILS) Approach
- Landing stall (low energy awareness)
- Circling Approach/Landing
- RTO & V1 Cut
- OEI 2D Approach (LOC) with autopilot
- OEI Missed Approach
- OEI crosswind Landing
- Right seat conversion (if needed)
- CFIT/Windshear
- Pilot Incapacitation

MALFUNCTIONS

1. PFD/MFD FAILURE
2. ADC/IRS FAILURE
3. UNRELIABLE AIRSPEED
4. ELECTRICAL FAILURE
5. SMOKE REMOVAL

REFERENCE MATERIAL

1. CYUL – Airport diagram
2. CYOW – Airport diagram

MANUALS

1. FCOM 1 & 2
2. QRH 1 & 2
3. MMEL/DDG
4. ATP – ACS
5. Pilot Skills List (PSL)

TC PILOT: SIM 5

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	CYUL (Elev 118')	CYUL	LOWI
DEST	CYOW (Elev 377')	CYUL	LOWI
POSITION	Holding short	Threshold	Threshold
DEP RWY	Rwy 06L	Rwy 06L / 24R	Rwy 26
FLT PLAN ALT	18 000'	3000'	4000'
FLIGHTPLAN	CYUL Rwy 06L MONTREAL 1 Dep YUL THURO RIVER 4 Arr CYOW	Multiple appr in CYUL	Rwy HDG – 250 KTS

WEATHER	**CYUL**	**CYOW**	**CYUL**	**CYUL**	**LOWI**
TIME OF DAY	NIGHT	NIGHT	DAY	DAY	DAY
WIND	150/15	160/10	100/15	190/15	CALM
VISIBILITY	1SM BR	3SM	RVR 600 (or 1200) BR	2SM	50 SM
CLOUDS	OVC009	OVC009	OVC009	OVC002	CAVOK
TEMP/DPT °C	03/00	03/00	03/00	03/00	20/10
ALTIMETER	29.84	29.84	29.84	29.84	29.84
RUNWAY	DRY	DRY	DRY	DRY	DRY
REMARKS	Windshear in area				

AIRCRAFT AND ENVIRONMENT SETUP

BOW	27114
PAX + CARGO (LB)	200 + 100
ZFW (LB)	27414
FUEL (LB)	7000
TOW (LB)	34 214 (taxi burn 200lb)
ZFW CG %	32 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE ON, WET			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	
VFTO		**TRIM**	

FAA/ICAO: SIM 5

OVERVIEW

This lesson, starting at KMEM (MEMPHIS), and concluding at KMEM (MEMPHIS), is designed to provide the pilot with the opportunity to accomplish normal flight operations and in-flight maneuvers in the Challenger 605 aircraft...

OBJECTIVES

Upon completion of this session the pilot should be able to understand and operate the aircraft systems and perform the maneuvers/profiles detailed below (Training Events) under IFR cold weather conditions. This session is dedicated to items not completed due to time constraint in previous details.

COMPLETION STANDARD

This session is complete when the pilot accomplishes the tasks listed in the content with the use of the cockpit checklists with minimum assistance from the instructor. The pilot shall also demonstrate the ability to operate the aircraft within the tolerances specified in reference manuals.

TRAINING EVENTS

- Engine Start/Malfunction
- FMS programming/AUTO-INHIBIT
- Taxi – Runway incursion awareness
- Take-off stall
- TCAS Event
- Stall Recognition, Recovery, Prevention
- Upset Recoveries
- Holding
- RNAV/3D (ILS) Approach
- Landing stall (low energy awareness)
- Circling Approach/Landing
- RTO & V1 Cut
- OEI 2D Approach (LOC) with autopilot
- OEI Missed Approach
- OEI crosswind Landing
- Right seat conversion (if needed)
- CFIT/Windshear
- Pilot Incapacitation

MALFUNCTIONS

1. PFD/MFD FAILURE
2. ADC/IRS FAILURE
3. UNRELIABLE AIRSPEED
4. ELECTRICAL FAILURE
5. SMOKE REMOVAL

REFERENCE MATERIAL

1. KMEM – Airport diagram
2. KMEM – Airport diagram

MANUALS

1. FCOM 1 & 2
2. QRH 1 & 2
3. MMEL/DDG
4. ATP – ACS
5. Pilot Skills List (PSL)

FAA/ICAO: SIM 5

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	KMEM (Elev 341 ft)	LOWI
DEST	KNQA (Elev 257 ft) / KNQA (Elev 257 ft)	LOWI
POSITION	EAST FBO	Threshold
DEP RWY	BBKNG 7 KERMI	RWY 26
FLT PLAN ALT	14,000 ft	4,000 ft
FLIGHTPLAN	KNQA BBKNG7	RWY HDG – 250kt

WEATHER

	KMEM	LOWI
TIME OF DAY	NIGHT/DAY	DAY
WIND	3/10kt	CALM
VISIBILITY	3km	50km
CLOUDS	OVC005	CAVOK
TEMP/DPT °C	04/03	20/10
ALTIMETER	QNH 1005	QNH 1005
RUNWAY	DRY	DRY
REMARKS	Windshear in area	

AIRCRAFT WEIGHTS & CONFIGURATION

BOW	27114
PAX + CARGO (LB)	200 + 100
ZFW (LB)	27414
FUEL (LB)	7000
TOW (LB)	34 214 (taxi burn 200lb)
ZFW CG %	32 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE ON			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	
VFTO		**TRIM**	

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

The following profile was designed to meet the requirements of Advisory Circular AC 120- 35D, titled: *Flightcrew Member Line Operational Simulations: Line-Oriented Flight Training, Special Purpose Operational Training, Line Operational Evaluation*. Additionally, it meets the requirements of FAA Order 8900.1, Volume 3, Chapter 54, Section 6.

LOFT is a sub-category of the LOS, LOS being the umbrella term for several different line-oriented simulation scenarios such as LOFT, SPOT and LOE.

LOFT is designed for crewmembers whose training has been completed using advanced simulation. The LOFT provides training that facilitates the transition from a Flight Simulator Training Device training to operational flying.

TRAINING OBJECTIVES:

The LOFT will provide an opportunity for each pilot to demonstrate workload management and pilot monitoring skills.

The LOFT scenario will generate opportunities for the following observable skills:

a. Situational Awareness
b. Communication
c. Decision Making
d. Workload Management as both PF and PM
e. Automation Management

The LOFT exercise must emphasize the avoidance of runway incursions, minimizing time on active runways, crew confirmation and coordination regarding correct takeoff/landing speeds, runways and crossing clearances. For example, current scenarios should emphasize runway safety, including complex taxi clearances.

The LOFT session will illustrate that realistic flight scenarios can create a high workload for crewmembers, and that there are important considerations that lie outside of basic airplane operation.

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

JEPPESEN CHARTS REQUIRED FOR LOFT SCENARIOS, ALL FLIGHT SEGMENTS

Client #1	
Departure Airport	
(KSEA)	Taxi Diagram
	RNAV SID Departure HAROB# – HOQUIAM Transition
Destination Airport	
(KAST)	STAR Arrival Direct to ILWAC for RWY 26 in use
	Approach (ILS approach RWY 26)
Alternate/Divert Airport	
(KPDX)	STAR Arrival DIRECT BUXOM
	Approach RNAV GPS Y RWY 10L
	Taxi Diagram
Client #2	
Departure Airport	
(KPDX)	Taxi Diagram
	RNAV SID Departure LAVAA
Destination Airport	
(KYKM)	STAR Arrival LAVAA #–YAKYMA TRANSITION
	Approach RNAV (GPS) X RWY 27
Divert Airport	
(KSEA)	STAR Arrival CHINS
	Approach ILS RWY 16L
	Taxi Diagram

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

CANDIDATE #1

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	KSEA
DEST	KAST
ALTERNATE	KPDX
FLT PLAN ALT	FL140
POSITION	RAMP GA (CARGO RAMP)
DEP RWY	16C
FLIGHTPLAN	RNAV SID Departure HAROB# – HOQUIAM Transition ILWAC

WEATHER	**KSEA**	**KAST**	**KPDX**
TIME OF DAY	NIGHT	NIGHT	NIGHT
WIND	200/10	190/12	130/112
VISIBILITY	5 SM	2 SM	3 SM
CLOUDS	SCT035	OVC005	OVC007
TEMP/DPT °C	19/09	17/05	20/09
ALTIMETER	A2996	A2996	A2996
RUNWAY	DRY	DRY	DRY
REMARKS	Thunderstorms & Windshear	Windshear / Tops 3500’	

AIRCRAFT AND ENVIRONMENT SETUP

BOW	27114
PAX + CARGO (LB)	4 pax + 200 lbs cargo (1 pax in jump seat)
ZFW (LB)	28114
FUEL (LB)	9700
TOW (LB)	37614 (taxi burn 200lb)
ZFW CG %	30 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE OFF			
V1		**N1**	
VR		**T/O CG %**	
V2		**TOD**	

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

VFTO		TRIM	

CANDIDATE #2

AIRCRAFT AND ENVIRONMENT SETUP

FLIGHT PLANNING

DEPARTURE	KPDX
DEST	KSEA
POSITION	Same place as SIM 6A terminated
ALTERNATE	KBFI
FLT PLAN ALT	FL250
DEP RWY	10L
FLIGHTPLAN	KPDX Rwy 10L PTLD XX Dep BTG OLM XX Arr KSEA

WEATHER

	KSEA	KPDX	KBFI
TIME OF DAY	NIGHT	NIGHT	NIGHT
WIND	200/10	130/112	280/10
VISIBILITY	5 SM	3 SM	2 SM
CLOUDS	SCT035	OVC007	OVC 015
TEMP/DPT °C	19/09	20/09	20/07
ALTIMETER	A2996	A2996	A2996
RUNWAY	DRY	DRY	DRY
REMARKS	Thunderstorms & Windshear		

AIRCRAFT AND ENVIRONMENT SETUP

BOW	27114
PAX + CARGO (LB)	3 pax + 200 lbs cargo
ZFW (LB)	27864
FUEL (LB)	9700
TOW (LB)	37364 (taxi burn 200lb)
ZFW CG %	31 %

AIRCRAFT PERFORMANCES

BLEEDS CLOSED, APR ON, ROLLING T/O, ANTI-ICE OFF			
V1		**N1**	
VR		**T/O CG %**	

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

V2		**TOD**	
VFTO		**TRIM**	

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

CLIENT #1

NOTAMS

KSEA 12/313 APRON NORTH SATELLITE TXL CLSD TO ACFT WINGSPAN MORE THAN 118FT AND TAIL HGT MORE THAN 45FT NORTH SIDE. 29 DEC 13:37 2018 UNTIL 30 JAN 08:00 2020. CREATED: 29 DEC 13:37 2018

KSEA 05/306 OBST CRANE (ASN 2018-ANM-1537-NRA) 472622N1221752W (0.8NM SE SEA) 582FT (200FT AGL) FLAGGED AND LGTD. 23 MAY 00:13 2019 UNTIL 31 AUG 03:00 2020. CREATED: 23 MAY 00:13 2019

KSEA 05/307 OBST CRANE (ASN 2018-ANM-1508-NRA) 472622N1221753W (0.8NM SE SEA) 541FT (160FT AGL) FLAGGED AND LGTD. 23 MAY 00:15 2019 UNTIL 31 AUG 03:00 2020. CREATED: 23 MAY 00:15 2019

KSEA 07/188 OBST CRANE (ASN 2017-ANM-2034-NRA) 472656N1221815W (0.3NM E SEA) 546FT (145FT AGL) FLAGGED AND LGTD. 16 JUL 17:02 2019 UNTIL 30 APR 23:00 2021. CREATED: 16 JUL 17:02 2019

KSEA 08/029 AD AP 100LL FUEL NOT AVBL. 03 AUG 01:10 2018 UNTIL PERM. CREATED: 03 AUG 01:11 2018

KSEA 11/031 APRON AIR CARGO 5 RAMP DUAL ENG TAX ONLY. 05 NOV 19:55 2019 UNTIL PERM. CREATED: 05 NOV 19:55 2019

KSEA 11/165 OBST CRANE (ASN 2017-ANM-1891-NRA) 472653N1221809W (0.4NM ESE SEA) 613FT (214FT AGL) FLAGGED AND LGTD. 16 NOV 17:40 2019 UNTIL 21 APR 07:00 2021. CREATED: 16 NOV 17:40 2019

KSEA 11/166 OBST CRANE (ASN 2017-ANM-1893-NRA) 472655N1221806W (0.4NM E SEA) 614FT (214FT AGL) FLAGGED AND LGTD. 16 NOV 17:41 2019 UNTIL 21 APR 07:00 2021. CREATED: 16 NOV 17:41 2019

KSEA 11/167 OBST CRANE (ASN 2019-ANM-1712-NRA) 472656N1221808W (0.36NM E SEA) 659FT (258FT AGL) FLAGGED AND LGTD. 16 NOV 17:36 2019 UNTIL 31 DEC 08:00 2020. CREATED: 16 NOV 17:42 2019

KSEA 11/168 OBST CRANE (ASN 2019-ANM-1710-NRA) 472654N1221811W (0.36NM E SEA) 659FT (258FT AGL) FLAGGED AND LGTD. 16 NOV 17:37 2019 UNTIL 31 DEC 08:00 2020. CREATED: 16 NOV 17:42 2019

KSEA 11/261 TWY A BTN UNITED MAINT RAMP AND AIR CARGO 2 RAMP WIP ACFT DEICING PROGRAM. 26 NOV 13:30 2019 UNTIL 26 NOV 19:00 2019. CREATED: 26 NOV 13:19 2019

KSEA 11/262 NAV ILS RWY 16L U/S. 03 DEC 16:00 2019 UNTIL 03 DEC 23:59 2019. CREATED: 26 NOV 16:00 2019

KSEA 11/263 NAV ILS RWY 34R U/S. 03 DEC 16:00 2019 UNTIL 03 DEC 23:59 2019. CREATED: 26 NOV 16:00 2019

KSEA 11/264 SVC TAR/SSR U/S. 03 DEC 16:00 2019 UNTIL 04 DEC 04:00 2019. CREATED: 26 NOV 16:00 2019

KAST 10/002 TWY A3 CLSD . 07 OCT 16:57 2019 UNTIL 30 JUN 23:59 2020. CREATED: 07 OCT 16:57 2019

KAST 9/6530 IAP ASTORIA RGNL, Astoria, OR. VOR RWY 8, AMDT 12A... PROCEDURE NA. 22 AUG 20:50 2019 UNTIL 02 APR 20:50 2020 ESTIMATED. CREATED: 22 AUG 20:50 2019

KPDX 10/081 RWY 10R/28L CLSD WED 2200-2300. 06 NOV 22:00 2019 UNTIL 04 MAR 23:00 2020.

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

KPDX 11/039 TWY K BTN TWY V AND TWY A4 CLSD TO ACFT WINGSPAN MORE THAN 118FT. 08 NOV 23:35 2019 UNTIL 30 JAN 23:59 2020. CREATED: 08 NOV 23:36 2019

KPDX 11/045 TWY T BTN TWY E2 AND TWY E3 CLSD TO ACFT WINGSPAN MORE THAN 118FT. 12 NOV 22:32 2019 UNTIL 31 JAN 08:00 2020. CREATED: 12 NOV 22:32 2019

KPDX 11/046 TWY K BTN TWY A5 AND TWY V CLSD TO ACFT WINGSPAN MORE THAN 168FT. 12 NOV 22:33 2019 UNTIL 31 JAN 08:00 2020. CREATED: 12 NOV 22:34 2019

KPDX 11/047 TWY V CLSD TO ACFT WINGSPAN MORE THAN 168FT. 12 NOV 22:34 2019 UNTIL 31 JAN 08:00 2020. CREATED: 12 NOV 22:34 2019

KPDX 03/017 TWY K BTN TWY A5 AND TWY V WIP CONST ADJ SOUTH SIDE BARRICADED. 11 MAR 15:00 2018 UNTIL PERM. CREATED: 08 MAR 22:29 2018

KPDX 9/7424 SID PORTLAND INTL, PORTLAND, OR. CASCADE TWO DEPARTURE (RNAV)... HRMNS FIVE DEPARTURE (RNAV)... LAVAA SIX DEPARTURE (RNAV)... MINNE FIVE DEPARTURE (RNAV)... PORTLAND ONE DEPARTURE... WHAMY FOUR DEPARTURE (RNAV)... TAKEOFF OBSTACLE NOTES: RWY 28R, 2 TEMPORARY CRANES, BEGINNING 3871 FT FROM DER, 1153 FT LEFT OF CENTERLINE, 105 AGL/UP TO 139 MSL (2019-ANM-1201/1202-NRA). ALL OTHER DATA REMAINS AS PUBLISHED. 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:30 2019

KPDX 9/7426 ODP PORTLAND INTL, PORTLAND, OR. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 8... TAKEOFF OBSTACLE NOTES: RWY 28R, 2 TEMPORARY CRANES, BEGINNING 3871 FT FROM DER, 1153 FT LEFT OF CENTERLINE, 105 AGL/UP TO 139 MSL (2019-ANM-1201/1202-NRA). ALL OTHER DATA REMAINS AS PUBLISHED. 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:30 2019

KPDX 9/7429 IAP PORTLAND INTL, PORTLAND, OR. RNAV (GPS) Y RWY 10R, AMDT 2B... LNAV/VNAV DA 350/HAT 326 ALL CATS, VISIBILITY ALL CATS RVR 2600. 6 TEMPORARY CRANES, UP TO 139 MSL, BEGINNING 1428FT EAST OF RWY 10R (2019-ANM-1200 THRU 1203, 1211, 1212-NRA). 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:31 2019

KPDX 9/7432 IAP PORTLAND INTL, PORTLAND, OR. RNAV (RNP) Z RWY 10L, AMDT 1A... RNP 0.30 DA 448/HAT 418 ALL CATS VISIBILITY ALL CATS RVR 4000. CHANGE INOP NOTE TO READ: FOR INOPERATIVE MALSR, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 6000. 6 TEMPORARY CRANES, UP TO 139 MSL, BEGINNING 5101FT WEST OF RWY 10L (2019-ANM-1200 THRU 1203, 1211, 1212-NRA). 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:31 2019

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

Winds/Temps Aloft

Pacific Coast

DATA BASED ON XX1200Z

VALID XX1800Z FOR USE 1400-2100Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
BIH		9900	2605-06	3134-08	3251-19	3067-30	319545	810856	318262
BLH	0218	3413-01	3126-03	3141-03	3061-13	2974-26	306644	317054	288259
FAT	1412	3205+00	3223-03	3238-06	3053-18	3072-28	319344	810255	318463
FOT	1927	2134-05	2761-04	2869-07	2859-20	2956-32	299447	309855	800361
ONT	0413	0407+02	3228+02	3238-02	3054-13	3057-25	317043	318053	307263
RBL	1712	1916-03	2528-07	2854-07	2966-20	3068-33	309047	800956	319960
SAC	1806	2411-01	3028-02	3144-07	3148-20	3064-31	309545	800855	800463
SAN	0506	3317+06	3228+04	3132+00	3048-12	2957-25	325343	326353	286259
SBA	9900	3409+04	3329+02	3238-03	3153-13	3159-25	317742	317953	306662
SFO	2106	2917+03	3137-01	3146-06	3156-19	3072-29	309344	810754	810264
SIY		1724-06	2117-10	2637-11	2870-20	2862-33	297950	299056	318958
WJF		0513-01	3228+01	3238-03	3056-13	3063-26	318043	318554	297362
AST	1213	1111-07	1606-13	2512-19	2817-28	2647-38	267054	286656	305153
IMB			1909-14	2505-20	3025-27	2967-36	298053	298758	306157
LKV			1916-13	2512-16	2840-23	2976-34	297451	298958	317058
OTH	1733	1826-05	2024-10	2436-13	2764-21	2758-34	276350	288054	318255
PDX	1718	1615-07	1811-13	2313-19	2820-28	2755-37	287154	287156	305155
RDM		1816-07	1713-13	2307-19	2825-26	2967-35	277652	288158	306557
GEG		1705-09	9900-16	1705-24	2605-36	3141-44	307354	305355	303252
SEA	1408	1709-09	1611-15	1708-21	3013-31	3039-41	278254	296455	304153
YKM	1007	1310-08	1809-15	2107-22	3018-30	3143-41	288754	297557	304654

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

CLIENT #2

NOTAMS

KPDX 10/081 RWY 10R/28L CLSD WED 2200-2300. 06 NOV 22:00 2019 UNTIL 04 MAR 23:00 2020. CREATED: 31 OCT 05:15 2019

KPDX 11/039 TWY K BTN TWY V AND TWY A4 CLSD TO ACFT WINGSPAN MORE THAN 118FT. 08 NOV 23:35 2019 UNTIL 30 JAN 23:59 2020. CREATED: 08 NOV 23:36 2019

KPDX 11/045 TWY T BTN TWY E2 AND TWY E3 CLSD TO ACFT WINGSPAN MORE THAN 118FT. 12 NOV 22:32 2019 UNTIL 31 JAN 08:00 2020. CREATED: 12 NOV 22:32 2019

KPDX 11/046 TWY K BTN TWY A5 AND TWY V CLSD TO ACFT WINGSPAN MORE THAN 168FT. 12 NOV 22:33 2019 UNTIL 31 JAN 08:00 2020. CREATED: 12 NOV 22:34 2019

KPDX 11/047 TWY V CLSD TO ACFT WINGSPAN MORE THAN 168FT. 12 NOV 22:34 2019 UNTIL 31 JAN 08:00 2020. CREATED: 12 NOV 22:34 2019

KPDX 03/017 TWY K BTN TWY A5 AND TWY V WIP CONST ADJ SOUTH SIDE BARRICADED. 11 MAR 15:00 2018 UNTIL PERM. CREATED: 08 MAR 22:29 2018

KPDX 9/7424 SID PORTLAND INTL, PORTLAND, OR. CASCADE TWO DEPARTURE (RNAV)... HRMNS FIVE DEPARTURE (RNAV)... LAVAA SIX DEPARTURE (RNAV)... MINNE FIVE DEPARTURE (RNAV)... PORTLAND ONE DEPARTURE... WHAMY FOUR DEPARTURE (RNAV)... TAKEOFF OBSTACLE NOTES: RWY 28R, 2 TEMPORARY CRANES, BEGINNING 3871 FT FROM DER, 1153 FT LEFT OF CENTERLINE, 105 AGL/UP TO 139 MSL (2019-ANM-1201/1202-NRA). ALL OTHER DATA REMAINS AS PUBLISHED. 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:30 2019

KPDX 9/7426 ODP PORTLAND INTL, PORTLAND, OR. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 8... TAKEOFF OBSTACLE NOTES: RWY 28R, 2 TEMPORARY CRANES, BEGINNING 3871 FT FROM DER, 1153 FT LEFT OF CENTERLINE, 105 AGL/UP TO 139 MSL (2019-ANM-1201/1202-NRA). ALL OTHER DATA REMAINS AS PUBLISHED. 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:30 2019

KPDX 9/7429 IAP PORTLAND INTL, PORTLAND, OR. RNAV (GPS) Y RWY 10R, AMDT 2B... LNAV/VNAV DA 350/HAT 326 ALL CATS, VISIBILITY ALL CATS RVR 2600. 6 TEMPORARY CRANES, UP TO 139 MSL, BEGINNING 1428FT EAST OF RWY 10R (2019-ANM-1200 THRU 1203, 1211, 1212-NRA). 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:31 2019

KPDX 9/7432 IAP PORTLAND INTL, PORTLAND, OR. RNAV (RNP) Z RWY 10L, AMDT 1A... RNP 0.30 DA 448/HAT 418 ALL CATS VISIBILITY ALL CATS RVR 4000. CHANGE INOP NOTE TO READ: FOR INOPERATIVE MALSR, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 6000. 6 TEMPORARY CRANES, UP TO 139 MSL, BEGINNING 5101FT WEST OF RWY 10L (2019-ANM-1200 THRU 1203, 1211, 1212-NRA). 04 NOV 18:30 2019 UNTIL 15 JUN 18:30 2020 ESTIMATED. CREATED: 04 NOV 18:31 2019

KSEA 12/313 APRON NORTH SATELLITE TXL CLSD TO ACFT WINGSPAN MORE THAN 118FT AND TAIL HGT MORE THAN 45FT NORTH SIDE. 29 DEC 13:37 2018 UNTIL 30 JAN 08:00 2020. CREATED: 29 DEC 13:37 2018

KSEA 05/306 OBST CRANE (ASN 2018-ANM-1537-NRA) 472622N1221752W (0.8NM SE SEA) 582FT (200FT AGL) FLAGGED AND LGTD. 23 MAY 00:13 2019 UNTIL 31 AUG 03:00 2020. CREATED: 23 MAY 00:13 2019

KSEA 05/307 OBST CRANE (ASN 2018-ANM-1508-NRA) 472622N1221753W (0.8NM SE SEA) 541FT (160FT AGL) FLAGGED AND LGTD. 23 MAY 00:15 2019 UNTIL 31 AUG 03:00 2020. CREATED: 23 MAY 00:15 2019

FAA/TC/ICAO PILOT: SIM 6A (LOFT)

KSEA 07/188 OBST CRANE (ASN 2017-ANM-2034-NRA) 472656N1221815W (0.3NM E SEA) 546FT (145FT AGL) FLAGGED AND LGTD. 16 JUL 17:02 2019 UNTIL 30 APR 23:00 2021. CREATED: 16 JUL 17:02 2019

KSEA 08/029 AD AP 100LL FUEL NOT AVBL. 03 AUG 01:10 2018 UNTIL PERM. CREATED: 03 AUG 01:11 2018

KSEA 11/031 APRON AIR CARGO 5 RAMP DUAL ENG TAX ONLY. 05 NOV 19:55 2019 UNTIL PERM. CREATED: 05 NOV 19:55 2019

KSEA 11/165 OBST CRANE (ASN 2017-ANM-1891-NRA) 472653N1221809W (0.4NM ESE SEA) 613FT (214FT AGL) FLAGGED AND LGTD. 16 NOV 17:40 2019 UNTIL 21 APR 07:00 2021. CREATED: 16 NOV 17:40 2019

KSEA 11/166 OBST CRANE (ASN 2017-ANM-1893-NRA) 472655N1221806W (0.4NM E SEA) 614FT (214FT AGL) FLAGGED AND LGTD. 16 NOV 17:41 2019 UNTIL 21 APR 07:00 2021. CREATED: 16 NOV 17:41 2019

KSEA 11/167 OBST CRANE (ASN 2019-ANM-1712-NRA) 472656N1221808W (0.36NM E SEA) 659FT (258FT AGL) FLAGGED AND LGTD. 16 NOV 17:36 2019 UNTIL 31 DEC 08:00 2020. CREATED: 16 NOV 17:42 2019

KSEA 11/168 OBST CRANE (ASN 2019-ANM-1710-NRA) 472654N1221811W (0.36NM E SEA) 659FT (258FT AGL) FLAGGED AND LGTD. 16 NOV 17:37 2019 UNTIL 31 DEC 08:00 2020. CREATED: 16 NOV 17:42 2019

KSEA 11/261 TWY A BTN UNITED MAINT RAMP AND AIR CARGO 2 RAMP WIP ACFT DEICING PROGRAM. 26 NOV 13:30 2019 UNTIL 26 NOV 19:00 2019. CREATED: 26 NOV 13:19 2019

KSEA 11/262 NAV ILS RWY 16L U/S. 03 DEC 16:00 2019 UNTIL 03 DEC 23:59 2019. CREATED: 26 NOV 16:00 2019

KSEA 11/263 NAV ILS RWY 34R U/S. 03 DEC 16:00 2019 UNTIL 03 DEC 23:59 2019. CREATED: 26 NOV 16:00 2019

KSEA 11/264 SVC TAR/SSR U/S. 03 DEC 16:00 2019 UNTIL 04 DEC 04:00 2019. CREATED: 26 NOV 16:00 2019

KBFI 11/043 OBST TOWER LGT (ASR 1058348) 473052.10N1222108.80W (2.2NM WSW BFI) 463.9FT (92.8FT AGL) U/S. 20 NOV 09:44 2019 UNTIL 18 FEB 23:59 2020. CREATED: 20 NOV 09:44 2019

KBFI 11/047 RWY 14R PAPI BEYOND 7DEG LEFT AND BEYOND 6DEG RIGHT OF RCL UNUSABLE. 22 NOV 15:29 2019 UNTIL PERM. CREATED: 22 NOV 15:45 2019

KBFI 11/048 OBST PARKED ACFT (ASN UNKNOWN) 473121N1221737W (.66NM SE BFI) 71FT (53FT AGL) NOT LGTD. 24 NOV 16:55 2019 UNTIL 28 NOV 22:00 2019. CREATED: 24 NOV 13:35 2019

KBFI 9/5796 ODP BOEING FIELD/KING COUNTY INTL, Seattle, WA. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 8... TAKEOFF MINIMUMS: RWY 32L, 400-1 7/8 WITH MINIMUM CLIMB OF 235FT PER NM TO 900 OR STANDARD WITH MINIMUM CLIMB OF 425FT PER NM TO 500 OR 1000-2 1/2 FOR VCOA. TEMP CRANE 675 MSL 3.79 NM NORTHWEST OF DEPARTURE END RWY 32L (2018-ANM-1958-OE). ALL OTHER DATA REMAINS AS PUBLISHED. 09 SEP 17:05 2019 UNTIL 05 JAN 17:05 2020 ESTIMATED. CREATED: 09 SEP 17:05 2019

KBFI 9/9244 IAP BOEING FIELD/KING COUNTY INTL, Seattle, WA. ILS OR LOC RWY 14R, AMDT 31... CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {54}). 13 AUG 19:59 2019 UNTIL 13 AUG 19:59 2021 ESTIMATED. CREATED: 13 AUG 20:00 2019

KBFI 9/9245 IAP BOEING FIELD/KING COUNTY INTL, Seattle, WA. RNAV (GPS) Y RWY 14R, AMDT 1... RNAV (RNP) Z RWY 14R, AMDT 1

Winds/Temps Aloft

Pacific Coast

DATA BASED ON XX1200Z

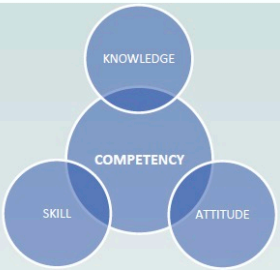
VALID XX1800Z FOR USE 1400-2100Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
BIH		9900	2605-06	3134-08	3251-19	3067-30	319545	810856	318262
BLH	0218	3413-01	3126-03	3141-03	3061-13	2974-26	306644	317054	288259
FAT	1412	3205+00	3223-03	3238-06	3053-18	3072-28	319344	810255	318463
FOT	1927	2134-05	2761-04	2869-07	2859-20	2956-32	299447	309855	800361
ONT	0413	0407+02	3228+02	3238-02	3054-13	3057-25	317043	318053	307263
RBL	1712	1916-03	2528-07	2854-07	2966-20	3068-33	309047	800956	319960
SAC	1806	2411-01	3028-02	3144-07	3148-20	3064-31	309545	800855	800463
SAN	0506	3317+06	3228+04	3132+00	3048-12	2957-25	325343	326353	286259
SBA	9900	3409+04	3329+02	3238-03	3153-13	3159-25	317742	317953	306662
SFO	2106	2917+03	3137-01	3146-06	3156-19	3072-29	309344	810754	810264
SIY		1724-06	2117-10	2637-11	2870-20	2862-33	297950	299056	318958
WJF		0513-01	3228+01	3238-03	3056-13	3063-26	318043	318554	297362
AST	1213	1111-07	1606-13	2512-19	2817-28	2647-38	267054	286656	305153
IMB			1909-14	2505-20	3025-27	2967-36	298053	298758	306157
LKV			1916-13	2512-16	2840-23	2976-34	297451	298958	317058
OTH	1733	1826-05	2024-10	2436-13	2764-21	2758-34	276350	288054	318255
PDX	1718	1615-07	1811-13	2313-19	2820-28	2755-37	287154	287156	305155
RDM		1816-07	1713-13	2307-19	2825-26	2967-35	277652	288158	306557
GEG		1705-09	9900-16	1705-24	2605-36	3141-44	307354	305355	303252
SEA	1408	1709-09	1611-15	1708-21	3013-31	3039-41	278254	296455	304153
YKM	1007	1310-08	1809-15	2107-22	3018-30	3143-41	288754	297557	304654

PILOT CORE COMPETENCIES

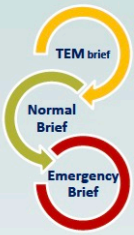
CAE

Application Of Procedures	Flight Path Management Automation	Leadership & Teamwork	Situation Awareness
Technical & Operational Use of checklist, SOP's, Policies Client/ Commercial Awareness Non-normal/ Emergencies/ MMEL Aircraft Systems knowledge	Pro-active monitoring when flying Manages automation levels Manages limitations & errors Actively monitors & supports Energy Management	Balances cockpit gradient Flexible, Approachable, Respectful Relaxed & professional tone Aspires to high standards Thinks independently Assertive when required	Thorough pre-flight preparation Stays ahead & updates plans Makes contingency plans Keeps broad perspective Self aware & seeks feedback Threat and Error Management
Communication	**Flight Path Management Manual Control**	**Problem Solving & Decision Making**	**Workload Management**
Outlines plans & differences Clear communication Checks understanding Seeks input & actively listens ATC RT standards	Safe, effective, comfortable Actively monitors & supports Manages errors Handles degraded performance Energy Management	Identifies problems/ issues Involves others where needed Reviews/ evaluates outcome Uses structure in new situations Admits mistakes & doubts	Allocates tasks sensibly Recognises High Workload Takes or Makes time Deals with overloads & priorities Avoids distractions & distracting



Decision Making ~ TDODAR

- **T**ime
- **D**iagnose
- **O**ptions/Risks
- **D**ecision
- **A**ssign
- **R**eview

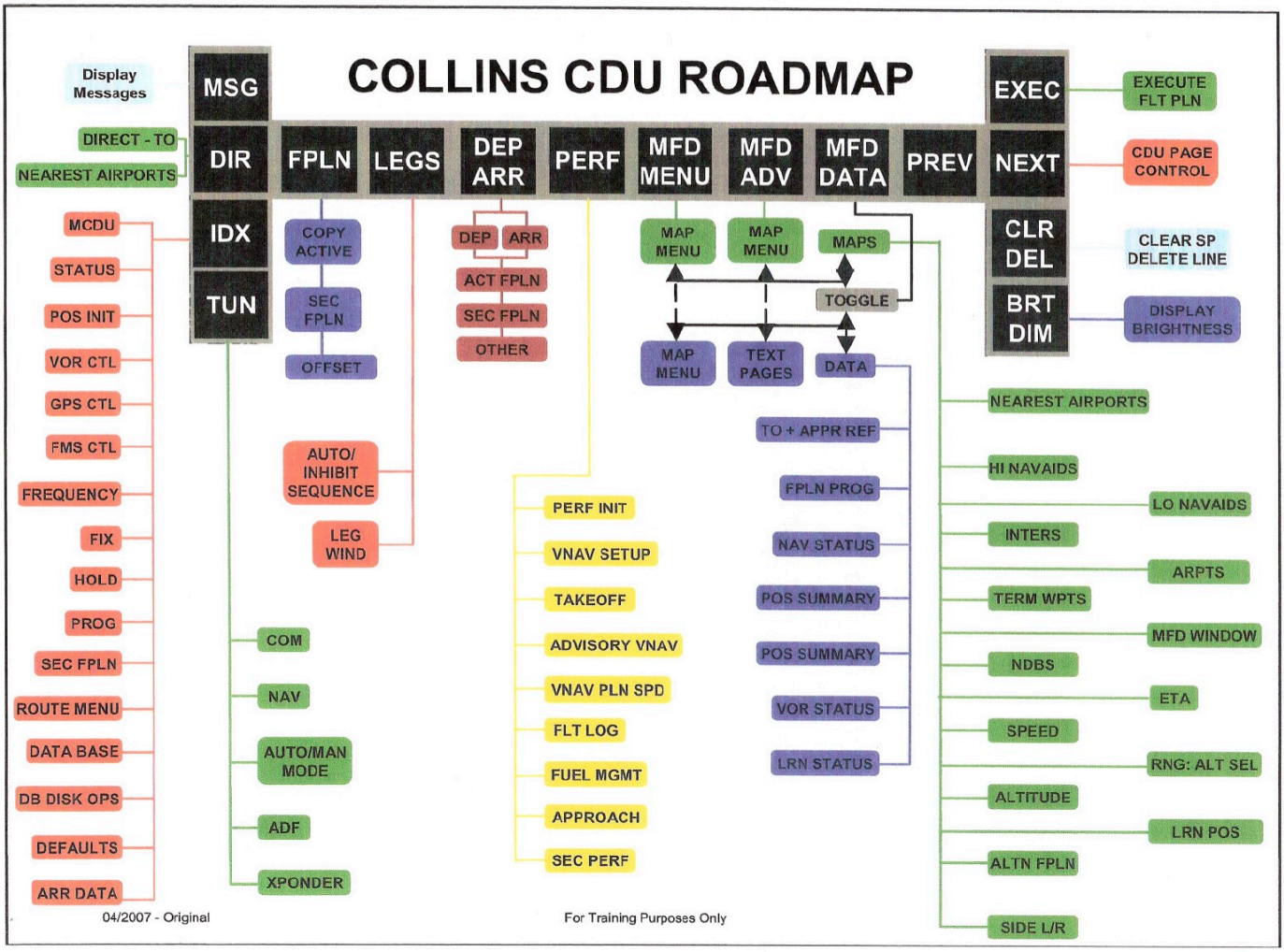


Communication Tool ~NITS

- **N**ature
- **I**ntentions
- **T**imings
- **S**pecials

READBACK & REVIEW

ORIGINAL REVISION OCTOBER 2018


COLLINS CDU ROADMAP
Display Messages
MSG
DIRECT - TO
NEAREST AIRPORTS
DIR
FPLN
LEGS
DEP ARR
PERF
MFD MENU
MFD ADV
MFD DATA
PREV
NEXT
EXEC
EXECUTE FLT PLN
CDU PAGE CONTROL
IDX
TUN
MCDU
STATUS
POS INIT
VOR CTL
GPS CTL
FMS CTL
FREQUENCY
FIX
HOLD
PROG
SEC FPLN
ROUTE MENU
DATA BASE
DB DISK OPS
DEFAULTS
ARR DATA
COPY ACTIVE
SEC FPLN
OFFSET
AUTO/ INHIBIT SEQUENCE
LEG WIND
COM
NAV
AUTO/MAN MODE
ADF
XPONDER
DEP
ARR
ACT FPLN
SEC FPLN
OTHER
PERF INIT
VNAV SETUP
TAKEOFF
ADVISORY VNAV
VNAV PLN SPD
FLT LOG
FUEL MGMT
APPROACH
SEC PERF
MAP MENU
MAP MENU
MAPS
TOGGLE
MAP MENU
TEXT PAGES
DATA
TO + APPR REF
FPLN PROG
NAV STATUS
POS SUMMARY
POS SUMMARY
VOR STATUS
LRN STATUS
CLR DEL
CLEAR SP DELETE LINE
BRT DIM
DISPLAY BRIGHTNESS
NEAREST AIRPORTS
HI NAVAIDS
LO NAVAIDS
INTERS
ARPTS
TERM WPTS
MFD WINDOW
NDBS
ETA
SPEED
RNG: ALT SEL
ALTITUDE
LRN POS
ALTN FPLN
SIDE L/R
04/2007 - Original
For Training Purposes Only

APPROACH MATRIX

Recommended modes

APRROACH TYPE	FCP MODES		FMA READOUT		ALTITUDE SELECTOR
	LAT.	VERT.	LATERAL	VERTICAL	
STRAIGHT-IN ILS	APPR		APPR LOC1 (L-FMA) APPR LOC2 (R-FMA)	GS	M/A ALTITUDE
STRAIGHT IN FMS RWY APPR (RNAV GPS/VOR/NDB)	APPR	VNAV	APPR LNV1 (L-FMA) APPR LNV2 (R-FMA)	VGP	M/A ALTITUDE
STRAIGHT IN FMS V-MDA APPR (RNAV GPS/VOR/NDB)	APPR	VS	APPR LNV1 (L-FMA) APPR LNV2 (R-FMA)	VS	MDA or M/A ALT.
STRAIGHT-IN LOC ONLY	APPR ↓ NAV (After NAV to NAV xfert)	VS	APPR LOC1 → LOC1 (L-FMA) APPR LOC2 → LOC1 (R-FMA) After NAV mode selected Note: If Right seat is PF with FD source selected on his side, LOC2 will be seen on both FMAs in this case.	VS	MDA or M/A ALT.
VISUAL APPR	APPR	VNAV	APPR LNV1 (L-FMA) APPR LNV2 (R-FMA)	VPATH	0
STRAIGHT-IN VOR (NOT IN FMS DATABASE)	APPR	VS	APPR VOR1 (L-FMA) APPR VOR2 (R-FMA)	VS	MDA or M/A ALT.
STRAIGHT-IN NDB (NOT IN FMS DATABASE)	HDG	VS	HDG	VS	MDA or M/A ALT.
STRAIGHT-IN LOC B/C	B/C	VS	B/C1 or B/C2 (Both FMAs) according to onside FD selection	VS	MDA or M/A ALT.
CIRCLING	As per approach type	VS	AS PER APPROACH TYPE	VS	MDA

NOTE 1:
An FMS approach can be a stand-alone GNSS or a VOR / NDB overlay approach
(eg: LSZH *(GPS)* VOR Rwy 34)

NOTE 2:
If flying a stand-alone VOR or NDB approach (eg: *KJFK VOR RWY 04L*) pilots will tune/ident the VOR or NDB, set the VOR as the Pre-select Nav Source (with the published final approach course set), and display a Bearing Source needle for the published VOR/NDB. This allows for continuous monitoring of the primary navigation source throughout the approach. In the event of a VOR or NDB outage, a missed approach will be initiated.
Modes used will be APPR and VS to follow a CDFA profile, the M/A altitude should be set.

NOTE 3:
When conducting a CDFA approach using VS, the M/A altitude may be selected when on final leg.