



Preflight and Taxi

CAPTAIN	TRIGGER	FIRST OFFICER
Crew briefing Flight plan review Logbook review	D-60 Arrive at plane	No red tag, Logbook review (Signtr, EP-19, ETOPS PDC) <i>Not Powered: Power Up, IRU align, Fluids, Interior, Exterior, Aux panel</i> Powered: Aux Panel, IRU align, Fluids: Eng Oil, Hyd, O2 Interior Insp: 2 cklsts, 2 QRHs, MDM, Jep kits, Eng log, Spare EFB mount, Emer Equip (use placard), (Hard QRC)
PF or PM preflight Captain preflight	D-30	PF or PM preflight (see pg 2) FO preflight
PDC Verification. WARTS.	By D-10	PDC verification & WARTS brief (if PF)
Preflight Checklist		
Pre-Pushback msg* Fuel slip / EFSR	D-8	Start APU Pre-Pushback* & Fuel slip <i>*Check msg for: stay at gate for WDR, EFSR, MEL, NOTOC, rws</i>
Ext doors closed Hyd elec pumps (R,C,L) Main fuel pumps on	FA's ready for push	Ext doors closed (Recirc fans on) Transponder on Cockpit door locked
Pushback Checklist		
Verify grd crew ready Request push clearance Advise grd crew to push* Verify cleared to start Command eng start	Ready for push & Engine Start 757: start L eng 767: start R eng	(See page 2 for Engine Start, Delayed Start, and After Start flows) <i>*Capt: Do then say: "Beacon on, brakes released, cleared to push."</i>
After Start Checklist		
PERF INIT: Acpt/Rjct TAKEOFF REF p2: Accel ht Compare wts V speed bugs: V1, VR, Vref 30+40,+80 V2 in MCP	WDR Entry verification	Verify on WDR: flt#, ship#, date, release# TAKEOFF REF p1: Accept or Reject WDR & FMC agree: ZFW, Flaps, Thrust, CG/Trim, Rwy/Pos, Vspds, Gross wt TAKEOFF REF p2: ACCEL HT. Compare wts V speed bugs: V1, VR, Vref 30+40, Vref 30+80
"Salute recv'd, flaps _" "Call for taxi" External lights	Prepare for taxi	"Flap lever _" (Do and say) Call ramp/gnd cntrl for taxi "Clear right"
Rudder check	Taxiing	STATUS page, Aileron & elevator check
Taxi Checklist		
Command eng start	Delayed Eng Start	See page 2
Delayed After Start Checklist		
If PF: Takeoff Briefing*	Near runway	PA to PAX Transponder - TA/RA Packs & Bleeds - as req'd If PF: Takeoff Briefing* <i>*Takeoff Briefing: Rwy Outside & Inside Departure procedure, First fix Speeds, Heading/LNAV, Altitudes</i>
Before Takeoff Checklist		

Takeoff and Flight

TRIGGER	TASKS, FLOWS, and CHECKLISTS
Entering Runway	FO: Radar & Packs CA: "Final, Flaps, Fuel" (Final clear, Flaps set, MINTO fuel)
After Takeoff	PM: Gear Off, APU Off, A/I as req'd, Packs Auto After Takeoff Checklist
10,000'	Capt: No Smoking - cycle
18,000'	QNE Capt: External lights Climb Checklist
-----TOC & Cruise-----	Fuel check, Position reports, Seatbelt sign, (see QRC)
40nm to TOD	ATIS, 2Boxes, 2Bugs, Brakes, Brief PM: Pax PA, (ATIS), LPR, ETOPS Fuel xfeed
TOD	PM: "P.R.E." Pressurization (Ldg elev), Recall, 'Event' (when power near idle)
18,000'	QNH (domestic) Capt: External lights Descent Checklist
10,000'	PF & PM: Verify Nav instruments. Capt: Cycle No Smkg sign Approach Cklist
Before 1000'	Before Landing Checklist

After Landing & Post Flight

CAPTAIN	TRIGGER	FIRST OFFICER
Speed brake lever - Down External lights	After Landing Clear of rwy	Time Transponder - ON/XPNDR Flaps - up Radar - TCAS Anti-ice: Wings - off. Eng - as req'd. Stab trim - 4
After Landing Checklist		
"Shutdown eng _"	Single Eng taxi-in After 3 min cool down	Bleeds: Eng - off, Isol - on Eng A/I - off Fuel Control L or R - cutoff (757: kill L eng, 767: either)
	Near Gate (1 min out)	APU - start
Parking brake - on "Let 'em up, Shut 'em down" Hyd pumps - Off (L, C, R) Fuel pumps - Off Beacon - Off Parking brake - as req'd	Shutdown At Gate	Seltbelt sign Verify AC power (APU 'Run' light or EXT power ON) Fuel Controls - cutoff Bleeds: Eng - off. APU - on (as req'd) ILS - park Transponder - STBY & 0000 FD's - off Autobrakes - off
Shutdown Checklist		
After Shutdown Reminders Capt or FO or RP	Flightdeck door: 757 = guard & switch up. 767 = latch pin install Switch to ground power (APU off?) ACARS: Whose Indg, Fuel remaining, Log RNP & Autoland Fluids: Eng Oil ≥ 8 qts, Hyd quantity (no 'RF'), Oxy ≥ 1000psi Class II flts: IRS drift error: FMC > INDEX > MAINT > IRS MONITOR Pull Red CB's (more than 2 hr sit)	

Engine Start Flows

---One Engine Start Flow to Rule Them All---

Display ENGINE page

APU:

APU bleed - off.

Wait for 'valve' light off

Packs - off.

APU bleed - on

X-bleed:

Packs - off

Running eng: N2 ≥ 70%

Anti-ice - off (all)

C tank pumps - off (all)

Eng Start Selector - GND

Time - start

Verify: Oil press rising

Verify: N2 ≥ Ideal 25% (min: 757/18%. 767/15%)

Fuel Control - RUN

Verify: SPAR VALVE light on, off

---One AFTER Start Flow to Rule Them All---

APU - off (Leave on if req'd for takeoff perf)

Eng A/I - on for running eng, if in icing conditions

C tank pumps - on for running eng, if fuel in C tank

Bleeds: ("Out w/the old, in w/the new" "Don't cross the streams")

If APU off: APU & Isol bleeds - off. Eng 1(2) - on

If APU on: APU & Isol bleeds - on

Packs - Auto (if APU on, pause between packs)

Recall - check for msgs

Autobrakes - RTO

-----Power up-----

Batt - on

STBY Power - auto

Hyd electric pumps - off

Gear lever - down

Alt Flaps - norm

EXT PWR - on

Red CB's - in

Fluids - Oil, Hyd, O2

(17qts, no RF, 1000psi)

-----IRS Full Alignment-----

Mode switches - NAV (all 3)

FMS - IDENT page:

date, a/c type, engines,

FF vs Flt plan

- Swap DB's, Set IRS POS

-----FFOD's-----

See Checklist

-----Aux Panel-----

757 & 767:

Takeoff config - test

FFOD Grnd Prox - test

Status msgs - erase

Gen field - lights out

Flight Recorder - norm

Service interphone - off

Spare EFB mounts

---Additional **767** items---

(some) EEC - closed/normal

Bulk cargo heat - vent

Rsrve brks/steering - off

ISLN - light out

-----Manual Entry-----

IDENT - Model, Engines, "ARM" then FF #, Swap DB's

ROUTE p1 - Enter Origin, Dest, Rwy, Flt num "DAL__"

ROUTE p2 - Build from release or clearance

DEP ARR - choose Rwy, SID, Rwy, STAR, ACTIVATE, EXEC

PERF INIT - ZFW, Reserves, Crz alt, Cost Index, Step size

TAKEOFF - Verify "PRE-FLT COMPLETE"

VNAV - Enter/verify SPD TRANS, TRANS ALT, SPD RESTR

LEGS - Step climb info

WIND - Enter on LEGS > RTE DATA, DES > FORECAST

("10,10,2" rule: diff of 10°/10kt, 2°C rule)

FIX - First 2 reporting points

Class II ETP / Alternates:

- RTE 2 > RTE (optional)

- ORIGIN = 1st Alternate; DEST = 2nd Alternate

- Next page: 1st ALT, 1st ETP, 2nd ALT, 2nd ETP, Last ALT

Do not activate/exec RTE 2

Details of Preflight Flows

-----Overhead (PM)-----

Yaw dampers - on

Antiskid - on

(767) EEC - norm/on

Hyd L&R Eng switches - on

(all others off)

PTU - off

(767) Flt deck door lock - auto

Electrical panel:

Batt - on

Stby Pwr - auto

APU gen - on

Bus ties - auto

Util buses - on

Gen control - on

Voice Recorder - test

Lighting panel:

Taxi & Rwy turnoff - all off

Emer Lights - Armed/guarded

PASS OX light out

RAM AIR TURB light out

ENG IGN - 1 or 2, or Single

ENG START - auto

Fuel panel - all off

Anti-ice - all off / auto

Wiper - off

Lighting - all off, excpt Position

Window heat - all on

Pax signs - all on

Pressurization:

Auto rate - index

Lndg Alt - set to dest

Mode - Auto 1 or 2

Equip cooling - off/auto

Flt Deck door - auto

IND LTS - test

EEC - norm

(767) Cargo Heat - on

Air Conditioning panel:

temp - auto

Pack selector - auto

(off for grd air)

Trim air - on

Recirc fan - on

(off for grd air)

Gasper fan - on

Bleed air panel

L&R Eng bleed - off

APU bleed - on

Isolation - on

-----MCP (PM)-----

VOR/DME switch - auto

FD's - on

A/T ARM - arm

VNAV - arm

Bank limit - auto

Initial Heading and Altitude - set

A/P Disengage - up

-----Instrument Panel (PM)-----

Reserve brakes (steering) - off

(some) Terrain sys ovr - off

Standby instrmts: ILS - off

Set QNH

Standby Eng indctr - auto

Autobrakes - RTO

EICAS: check messages

No eng exceedances

Secndry Eng display - push

Oil ≥ 17 qrts (8 qrts at warm idle)

Status display

O2 press ≥ 1000psi

Hyd - no "RF"

Status msgs

Computer - auto

Thrust Ref - Both & In

(some) Heading Ref - norm

Alternate flaps - norm

LE & TE - off

Gear lever - down

ATLN Gear Extend - guarded

Grnd Prox (3 switches) - off

-----Pedestal (PM)-----

Radar - test, then leave in TCAS

Parking brake - set (on)

Alternate Stab trim - neutral

Stab trim cutouts - guarded

Speed Brake - down

Thrust levers - idle

Fuel Control - cutoff

Flaps - up

Fire panels - all lights out

Eng Fire handles - down/in

Cargo fire switches - off

APU fire handle - in

Radio tuning - freqs set

(757-3 non-satcom):

HF-L: data; HF-R: voice

(some) Center tuner:

Data (for ACARS)

L&R Audio Panels - set

HF radio - test

Transponder - STBY, 1L or 2R

FMS - verify entries

-----Pilot Flying Preflight-----

(IRS - Align)

ACARS - Initialize (SP.5)

ATC log - clear

FMS - Initialize (SP.5)

See "FMC Setup" below left

-----First Officer Preflight-----

Logbook - check

Ship# match

Airworthiness signed by Mx

Review EP-19's

Review MEL's/CDL's

ETOPS: Pre-Departure Check

Window - closed

EFB - set Orig, Dest, & Alt airports

- Content Locker: Vol 1

Heaters (side panel) - as needed

Oxygen mask - check

Instruments sources - L & off

Lights - set as needed

Altimeter - RVSM chk, QNH, bug elev

VSI - correct & no flags

Clock - UTC displayed

ADI - VNAV, TO, FD, TO

HSI - TRK & M, 10nm range

Autoland status - test

Airspeed - no flags

RDML - VOR

EFIS control panel

DH - neg value

Traffic - as req'd

Range - 10nm, A/C vs rwy pos

Terrain - as req'd

Mode - Map

Wx - off

Map switches - as req'd

ACP- set

Seat & Rudder - adjust

Fuel req'd - verify

ATIS - obtain

ATC clearance - obtain

-----Captain Preflight-----

Same as FO, with additional items:

Parking brake - set

Flight Attendant briefing

ATIS - review

ATC clearance - verify

-----Relief Pilot Preflight-----

Crew Rest Seat/Compartment

Blankets, Pillows

Potable water level

Lav tank level

External Walk around

FMC Setup

-----With Datalink-----

IDENT - Model, Engines, Swap DB's

POS INIT - enter airport, use best (GPS) lat/long

ACARS > INIT DATA > INIT RQ

FMC COMM > PERF uplink > ACCEPT

FMC COMM > RTE 1 > LOAD... ACTIVATE... EXEC

FMC COMM > WIND > LOAD... EXEC

FMC COMM > DESCENT FORECAST > LOAD

FMC COMM > RTE 2 > LOAD (do not Exec)

TAKEOFF > verify "PRE-FLT COMPLETE"

CLIMB/VNAV > Verify

CRZ ALT, SPD TRANS, TRANS ALT, Step size

Enter SPD RESTR > EXEC

FIX > 1st two reporting points

Limitations

757 max alt **42,000'**
 767 max alt **43,000'**
 Flaps max altitude **20,000'**
 Max crosswind **40 kts** (including gust)
 (Good for Cat 1 autoland)
 Max tailwind **10 kts**
 Autoland max winds for Cat 2 & 3 only:
 Head **25 kts**
 Cross **25/15 kts** (Boeing/DAL)
 Tail **10 kts**
 Autoland in Flaps 25 or 30 only
 Turbulent air **290 kts / .78 Mach**
 Autopilot engage **200'** min alt
 Aileron trim use with AP on is Prohibited.

Wingspans: All 757's: 134' All B767ER's: 166'
 APU Starter duty cycle: 3 attempts in 1 hour
 Engine Starter duty cycle:
 5 min cont., 30sec cool per min
 Never re-engage starter when N₂ above 20%
 No takeoff in N2 control mode (ENG LIM PROT light)
 Max fuel imbalance for takeoff: 1500lbs
 Fuel temps: Min: -37° (Jet A), -44° (Jet A1); Max 49°

APU bleed max alt 17,000'
 Max Takeoff & Landing Elev 8400' (9500' press alt)
 Certain ship #'s are exempt
 Max Landing weights (1,000's pounds)
 757-200 198
 757-300 224
 767-300 295
 767-300ER 320
 Runway Slope +/-2°
 No HF radio transmission/test during refueling.
 RVSM altimeter deviation:
 Ground: CA to FO: 25' (or chart Vol1-L.10.9)
 Ground: CA or FO to field elev: 75'
 Air: CA to FO: 200'
 If plane powered on ground when hotter than 34°C:
 Run packs or see cooling Limitations in Vol 1
 Severe Turbulence requires ignition. Turn on by:
 Eng Start Selector in CONT
 Flaps extended
 Eng A/I on
 Full control displacements only below V_A
 Autoland groundspeed must be ≤ 165kts
 Logbook entry required for limitation exceedances.

Memory Items

Aborted Engine Start

Fuel Control Switch (affected side).....Cutoff

Airspeed Unreliable

Autopilot disengage switch.....Push
 A/T Arm switchOff
 F/D switches (both).....Off
 If necessary to stabilize (gear up):
 Flaps extended (767).....10° and 80% N₁
 Flaps extended (757).....10° and 75% N₁
 Flaps up (both).....4° and 75% N₁

CABIN ALTITUDE / Rapid "D"

Don the oxygen masks
 Establish crew communications

Dual Engine Failure

Eng Start Selectors (both).....FLT
 Thrust levers (both).....Idle
 (Verify engines are really winding down)
 Fuel Control switches (both).....Cutoff, then run

Engine Fire, Severe Damage, Separation

A/T Arm switchOff
 Thrust lever (affected side) Confirm.....Idle

Engine Limit / Surge / Stall

A/T Arm switchOff
 Thrust lever (affected side) Confirm.....Retard
 until eng within limits, or idle



Cold Weather Ops

organized by phase of flight

Icing Conditions: ≤10° & Visible Moisture (vis ≤ 1mi / 1600m)

Ext Preflight - 757: Check 1st stage LPC stator (behind fan) for ice.

Check both wings from cabin

WARTS Brief: TO Alternate, Contam ramp/rwy, De-ice, 1 or 2 eng taxi,
 Cold wx eng run ups (≤3°), Eng A/I, Standing Takeoff

Engine Start: Contam ramp/txy: Eng A/I on

If 1 engine taxi & Eng A/I on: Only one Pack on

P&W engines: Don't go above taxi thrust until oil temp ≥ 50°

De-icing procedures: SP16.26

Taxi: Eng run-ups if in 'icing conditions' and OAT ≤3°:

P&W: Every 15mins (30 mins max on 757):

Run each eng up to 50% N₁ for 1 sec

GE: Every 30mins, run each eng up to 60% N₁ for 30 sec

Takeoff:

Runway Contaminant Decision Tree in SP16.23

Standing takeoff (icing cond & OAT ≤3°):

N₁ ≥60% before brake release

If vis < 1600 RVR: Captain only takeoff - Static Takeoff

In flight:

Icing conditions: Eng A/I On or Auto.

767 ships 121,124-139: Below 10,000': N₁ ≥ 40%
 Above 10,000': N₁ ≥ 45%

767 ships 1501-1506,1521,1601-1708:

Every 10 minutes, N₁ ≥ 70% for 10-30 sec.

767-300 GE: Before starting descent in icing conditions: Eng A/I On.
 Below 22,000', Wing A/I On.

Exit/Avoid Ice Crystal Icing (ICI). Suspected ICI, see NNC3.

Descent: FMS > Descent Forecast > TAI/ON ALT to adjust VNAV path.

If destination OAT ≤ -10°: Cold wx altitude adjustments

Approach / Landing:

If OAT ≤ -10°, adjust altitudes on appro. and tell ATC.

Braking Action vs Wind guidelines: See SP16.20

After Landing: Wing A/I off, Eng A/I on.

After prolonged flight in icing, or landing on contaminated runway:

Leave flaps at 20 until area around flaps checked for ice.

Secure: OAT < 0°, or may be de-iced: Close outflow valve:

Cabin Altitude Control mode select....MAN

Cabin Altitude Control Manual selector....DESCEND



International Ops

-----Briefing Room-----

Passport, Visas, Immunizations

Print/gather:

- Flight Plan (email to self and crew)
- Track Message
- Weather charts (Delta Meteorology)
- Plotting Chart
- IFBP log (Africa)

EFB – download route

Flight Plan markup

- Top line
- ETE
- Orig / Destination / Alternates
- Elevation of Dest.
- Track Letter in ICAO flt plan
- Initial Cruise Altitude
- Fuel: Block & MINTO
- MEL's
- Remarks
 - ETOPS alternates (dirt, water...)
 - Terrain boxes
 - City pair & Airport
- TM fixes vs HowGozIt fixes & alts
- ETA at 30W

Track Message markup

- 30W time valid
- TMI Julian date
- CPDLC/ADS-C mandated tracks/alts
- "End of part _ of _ parts"

-----Flight Deck prep-----

- MEL's and Theater Restrictions
- Jepp kit: ETOPS
- HF check (no fueling, if last flt not Class II)
- FMC Class II and adjacent fixes
 - PF – Load fixes
 - PM – Verify fixes & Circles on FP
- Clear MCDU ATC log
- WARTS extras:
 - Transition Altitude
 - Terrain:
 - Grid MORA
 - HSI terrain mode
 - EO procedures
 - EGPWS escape maneuver

-----Approaching Runway-----

Takeoff Brief extra: Transition Altitude

-----Flight-----

- 10,000'
 - Nav accuracy check
 - HowGozIt math homework
 - Calculate breaks
- 90min to Coast out
 - Request oceanic clearance
- 30min to Coast out or Clearance received
 - Route verification:
 - PM reads route from clrc / FP / TM
 - PF confirms WP's and Lat/long
 - PM marks FP with diagonal line \
 - ETP alternate wx
 - Put Mach for crossing in FMS

Coast out (OEP – Oceanic Entry Point)

- SLOP R1 or R2
- VHF radios: 123.45 & 121.5
- Set HF radios
- SELCAL check

After Coast out
Transponder 2000

FIR boundaries – 15 min before
CPDLC Logon
Ball notes

80nm before Class II fixes
PM: Reads next 3 WPs from FP
PF: Confirms next 3 WPs in FMS

Over fix
Verify LNAV & WP sequencing
HowGozIt update & 2nd diagonal line /

80nm after Class II fixes
Verify LNAV
FIX page ring around next WP

Coast in
Radios & Transponder
Confirm Clearance (route)
Request desired Altitude & Mach
Remove SLOP

Oceanic Engine Out

Trigger	PF	PM
Engine Failure	Stabilize aircraft Offset 5R in FMS ...or 5L if required Hold alt while bleeding speed Look for traffic: visual & TCAS	Read QRH: "Driftdown" ...don't EXEC Eng Out yet Ext lights on Tell ATC Advise on 121.5 & 123.45
At 5nm offset	EXEC VNAV ENG OUT Descend below tracks. Then: Turn toward alternate airport	

Oceanic Wx deviation

Trigger	PF	PM
Wx on track	FMS: Offset R (or L) Climb/Des 300' when ≥5nm R/L Look for traffic: visual & TCAS	Contact ATC Ext lights on Advise on 121.5 & 123.45
Done diverting	Return to course (then LNAV)	Advise ATC

Oceanic Immediate diversion (Fire, Smoke, Fumes)

Trigger	PF	PM
Need to Divert (fire/smoke/fume)	FMS: Offset 5R (or 5L, for L turn) After offset: Climb/Des 500' Look for traffic: visual & TCAS Who's PF and who's PM?	Contact ATC Ext lights on Advise on 121.5 & 123.45 QRH

(April 2019)

Maneuvers

Takeoff Windshear

Trigger	PF	PM
Windshear warning	AP off	Verify PF actions
	GA switch	
	Thrust levers max	
	AT disconnect	
	Follow FD	Callout altitude trends
Clear of Windshear	Reduce power, 15° pitch	Callout clear of windshear
	400': Lateral mode	
	1000': Climb power	
	AP on	
	Retract flaps	PIREP to ATC
	After TO checklist	

Approach Windshear

Trigger	PF	PM
Windshear warning	AP off	Verify PF actions
	GA switch	
	Thrust levers max	
	AT disconnect	
	Follow FD	Callout altitude trends
Clear of Windshear	Reduce power, 15° pitch	Callout clear of windshear
	GA switch (Do GA callouts)	
	400': Lateral mode	
	1000': Bug Flaps 5 spd	
	AP on	Verify VNAV
	Retract flaps (F5 or up)	PIREP to ATC
	After TO checklist	

Upset & Stall Recovery

Trigger	PF	PM
Upset/Stall	"Upset. Recover."	Verify PF actions
	Push, Roll, Power, Stabilize	

V1 Cut

Trigger	PF	PM
Power Loss	Hold centerline	
Vr	Rotate	"Rotate"
Positive rate	"Gear up"	"Positive Rate"
	Goal post & 12° pitch	
Stable in climb	"Set 15 units R/L rudder trim"	
400'	Lateral mode	Declare emergency
1000'	"Vertical speed 200"	
	"Disarm VNAV"	
	"Bug flaps 5 speed"	
	"FLCH"	
F5 man speed	"Select & set Continuous thrust"	
	"Disarm Autothrottle"	
	"Autopilot on"	
	"After takeoff checklist"	
Clear of terrain	"Non-Normal checklist"	
Level off altitude	"Reduce rudder trim to 10"	Set up for return to field

Single Engine ILS

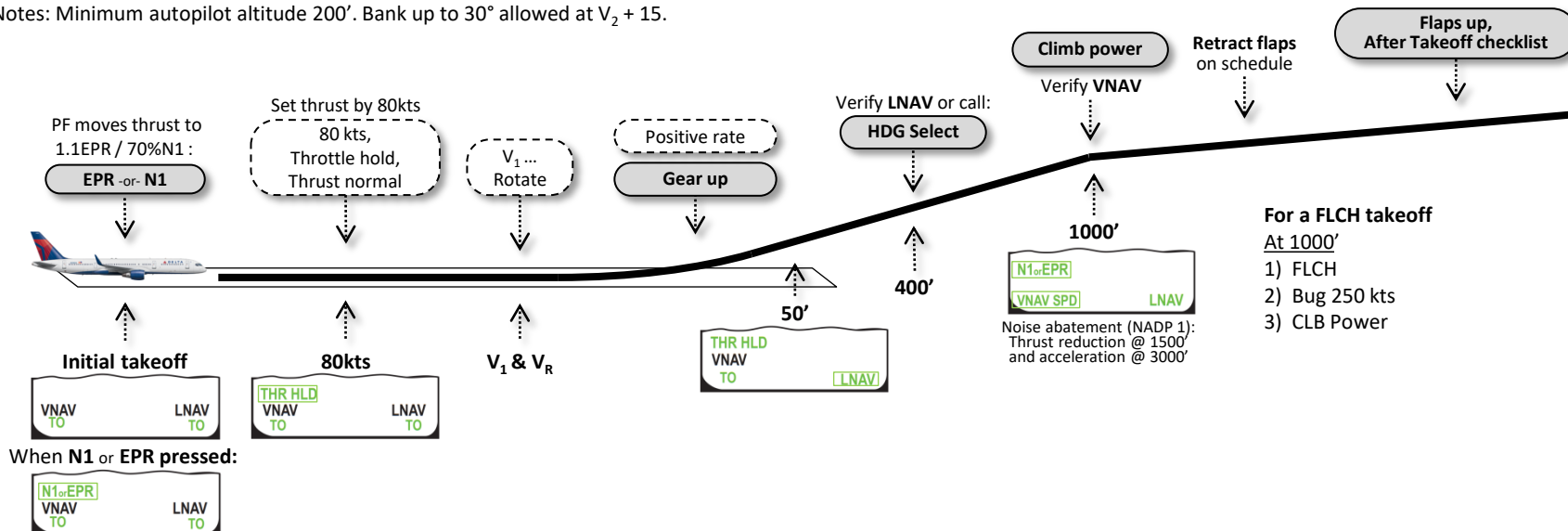
Trigger	PF	PM
Glide slope alive	"Gear down"	
	"Flaps 20"	
	"Bug flaps 20 speed"	
	"Set rudder trim to 5"	

Single Engine Go-around

Trigger	PF	PM
Go-around	"Go-around, Flaps 5"	"Go-around verified"
	"Gear up"	"Positive rate"
400'	Lateral mode	
1000'	"Bug Flaps 5 speed"	
Flaps 5 man spd	After Takeoff Checklist	

Normal Takeoff

Notes: Minimum autopilot altitude 200'. Bank up to 30° allowed at $V_2 + 15$.

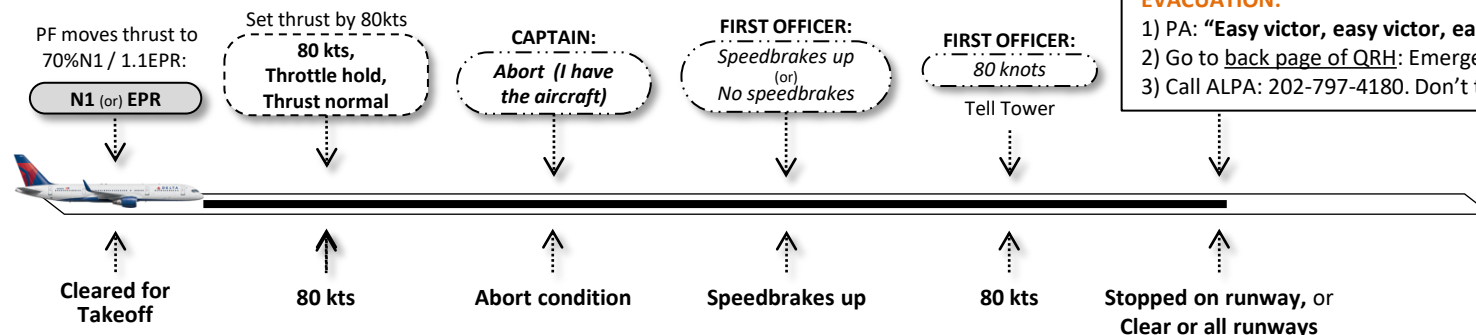


Aborted Takeoff

Autobrakes RTO arms above 85kts.

Reject below 80kts for: T/O config, Master Caution/Warning, Tire fail, bad vib / noise, window open.

Reject above 80kts only for: Master Warning, Fire, Eng fail, Predictive windshear, unsafe to fly.



No Evacuation:

- 1) PA: "This is the captain. We have discontinued the takeoff. Please remain seated with your seatbelts fastened."
- 2) Communicated with FA's.
- 3) Go to QRH NN 0.38 Rejected Takeoff Considerations
- 4) See FOM 2.3.10 RTO's: Call Duty Pilot. Keep pax informed. All aborts require an ASR.

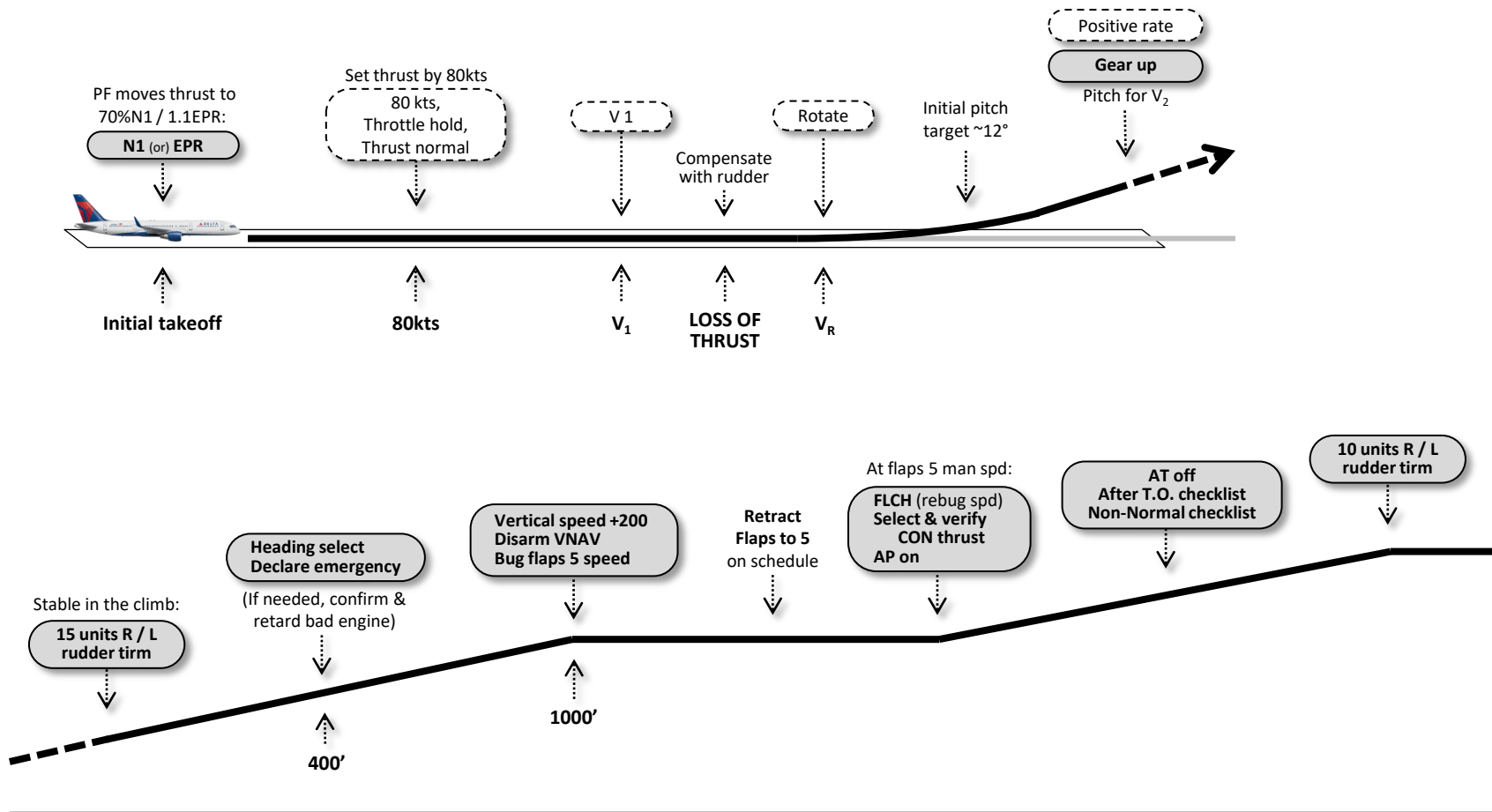
EVACUATION:

- 1) PA: "Easy victor, easy victor, easy victor"
- 2) Go to back page of QRH: Emergency Evacuation Checklist.
- 3) Call ALPA: 202-797-4180. Don't talk to the FAA.

Takeoff – Engine Failure

This profile assumes engine flameout at V₁, and a return to the departure airport (flaps left at 5).

Autopilot: Not until 200'
Close-in turn when single engine:
 - Keep bank less than 15°, until V₂+15
Inhibited:
 - **Cautions:** 80kts to 20secs WOW or >400'
 - **Warnings & Fire bell:** Rotation to 20sec WOW or >400'



Takeoff & Go-around Flap Retraction

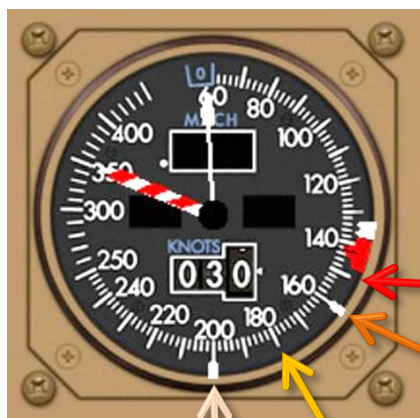


Call for **Flaps 5** (example: @141kt)

Call for **Flaps 1** (example: @161kt)

Call for **Flaps up** (example: @181kt)

Approach Flap Extension



Call for **Flaps 25/30**, Set **Vref**

Call for **Flaps 20**, Set **+20**

Call for **Flaps 5**, Set **+40**

Call for **Flaps 1**, Set **+60**

Retracting Flaps after Takeoff / Go-around

Current Flaps	Passing Speed...	Which spd bug is it?	Call for Flaps...
≥15	Vref30 + 20	(middle -20kt)	5
5	Vref30 + 40	Middle	1
1	Vref30 + 60	(highest -20kt)	0

Limit bank to 25° until above **Manuever** speed

Manuever speed = Minimum speed + 20kts

Manuevering speed protects up to 40° bank.

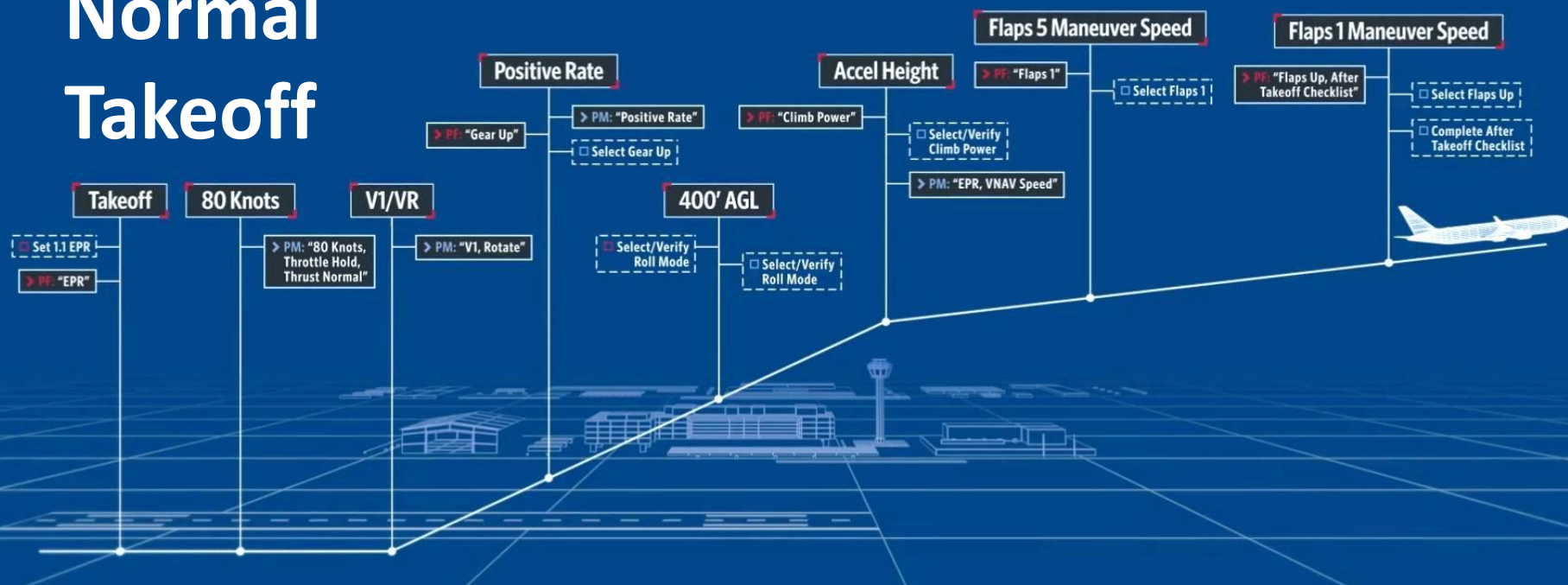
Setting Approach Flaps

Current Flaps	Manvr Speed	Which spd bug is it?	Call for Flaps...	Now bug speed...
0	Vref30 + 80	Highest	1	Vref30 + 60
1	Vref30 + 60	(half way)	5	Vref30 + 40
5	Vref30 + 40	Middle	20	Vref30 + 20
20	Vref30 + 20	(middle -20kt)	25 or 30	Vref + wind

Manuevering speed protects up to 40° bank.

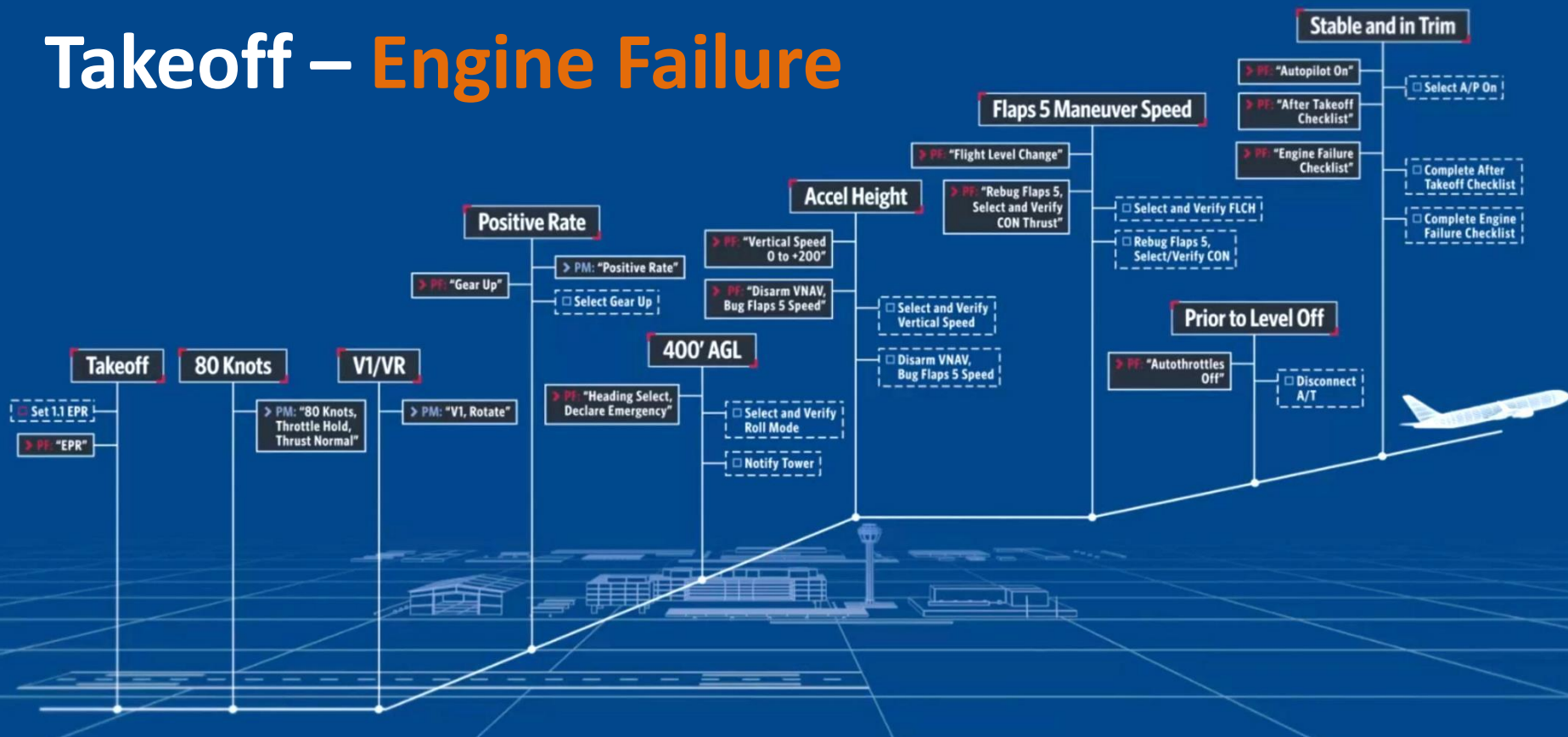
Minimum speed = manvr spd - 20kts. Protects up to 25° bank.

Normal Takeoff

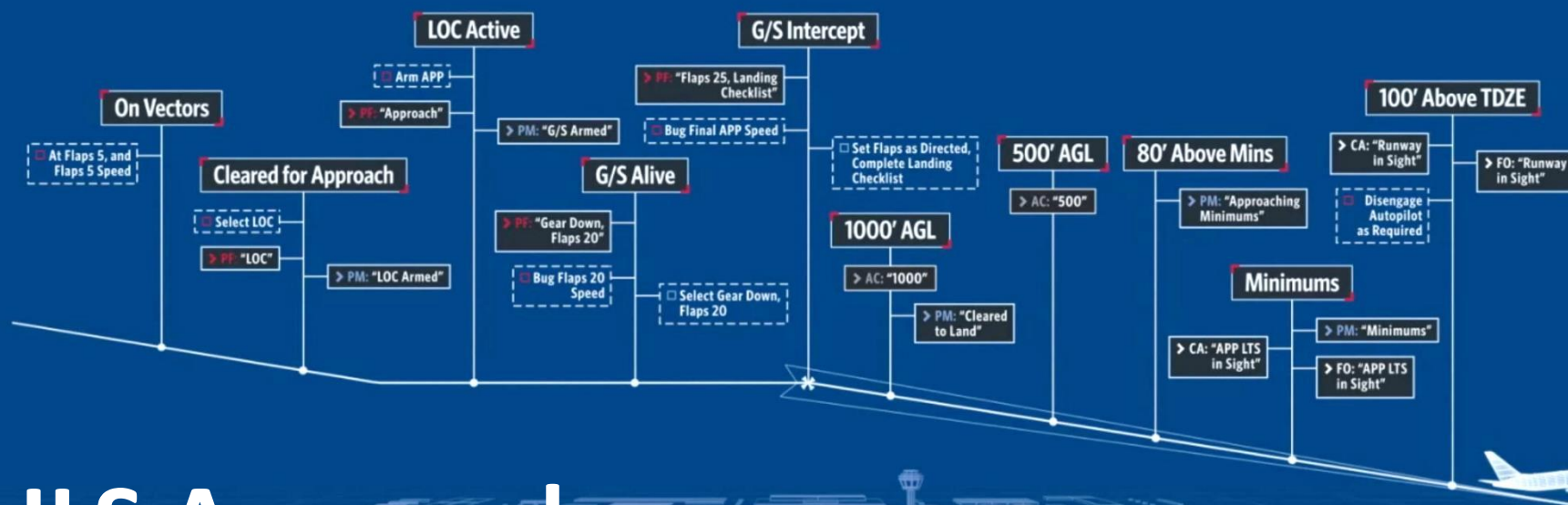


eBrief video screenshot

Takeoff – Engine Failure

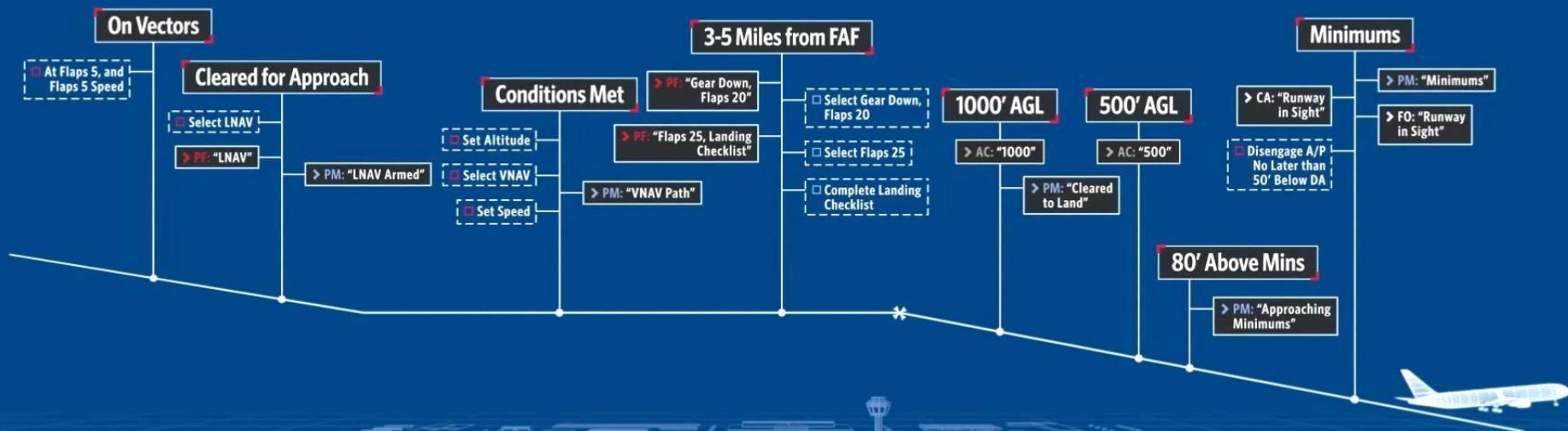


eBrief video screenshot



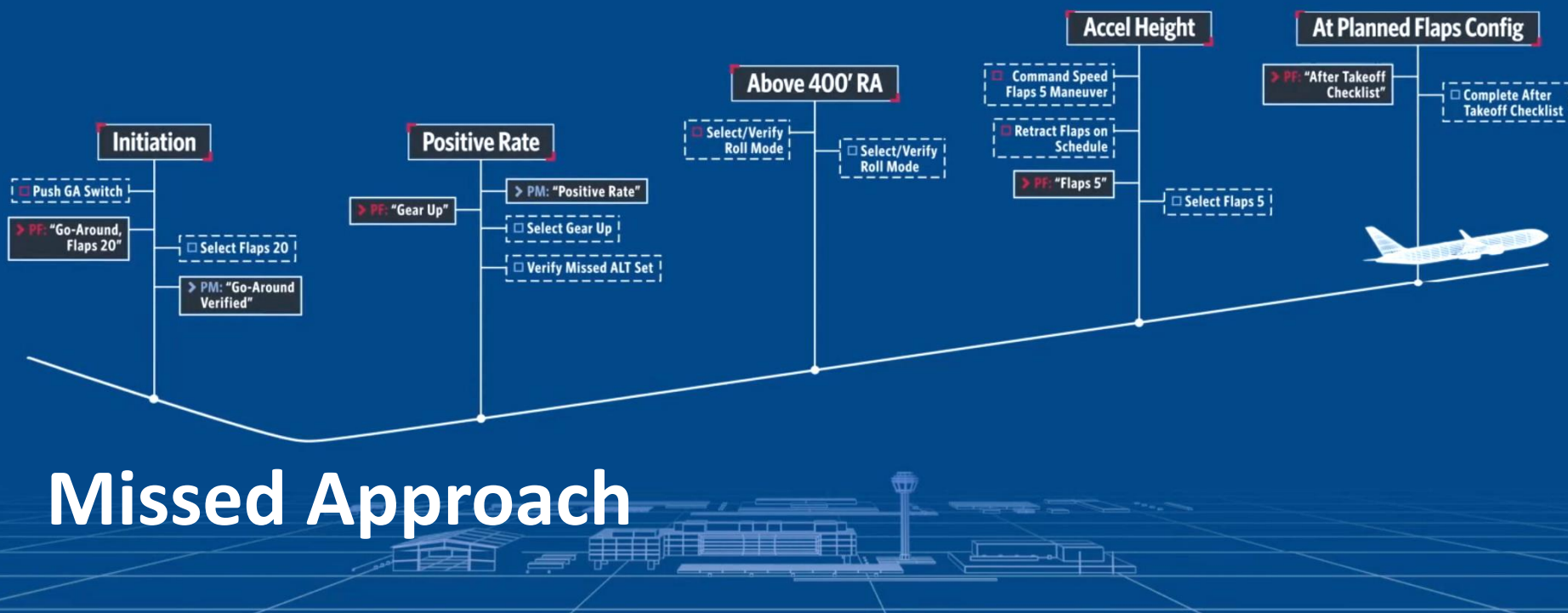
ILS Approach

eBrief video screenshot



RNAV Approach

eBrief video screenshot



Missed Approach

eBrief video screenshot