

Aircraft Navigation 101



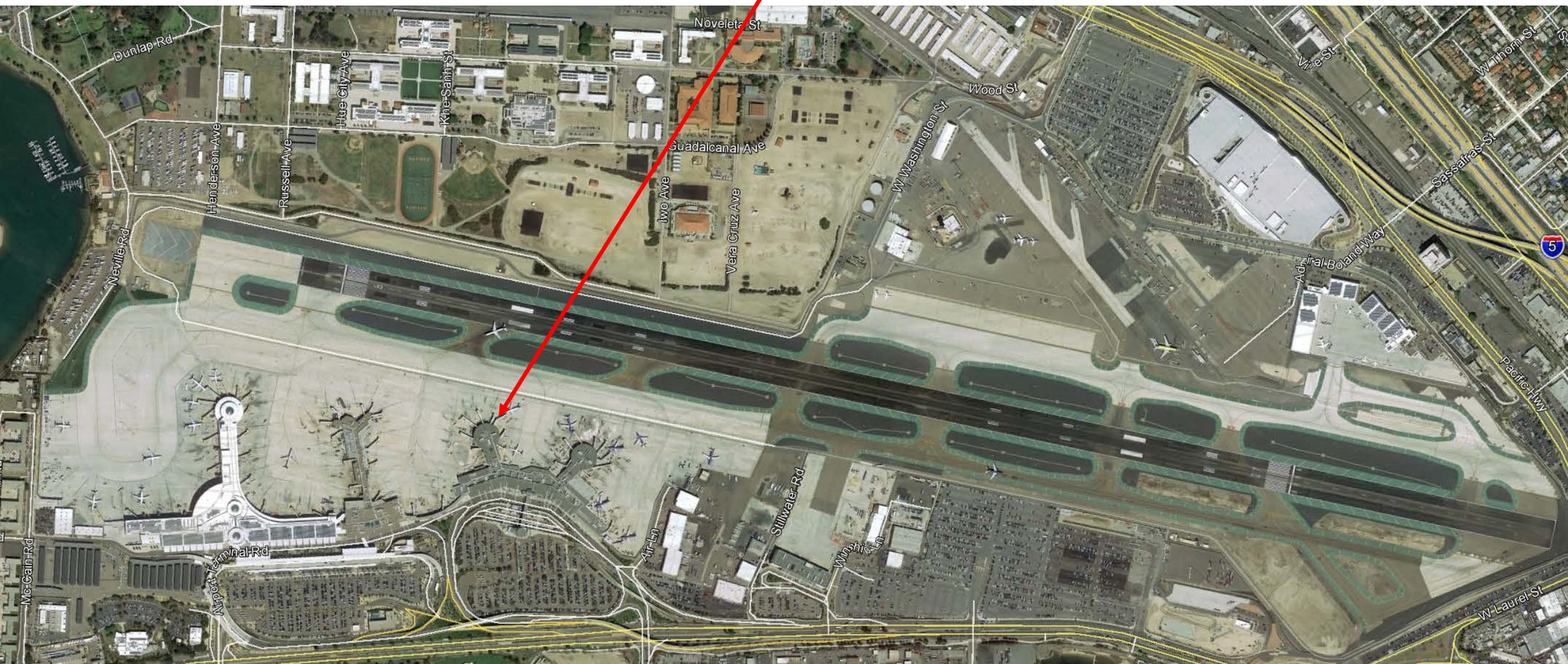
Grady Boyce

Professional Pilot & Flight Procedure Designer

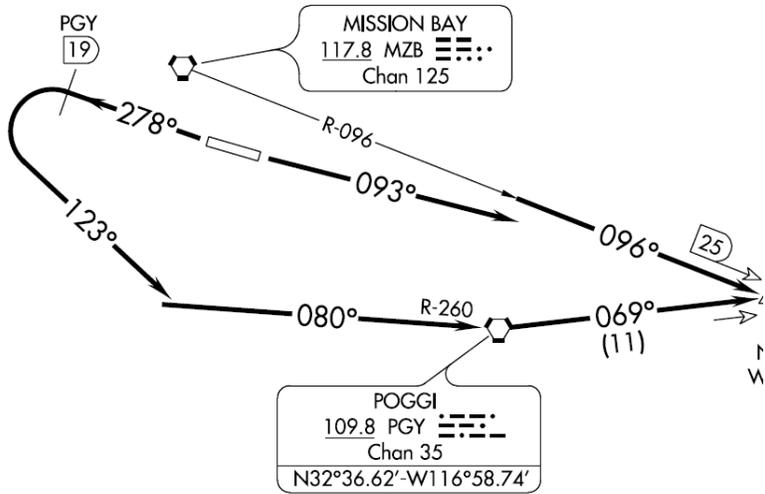
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Every flight starts here with the programming of the aircraft & flight plan



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RNAV (a.k.a. Satellite Based)

OR

Non-RNAV (a.k.a. Ground Based)

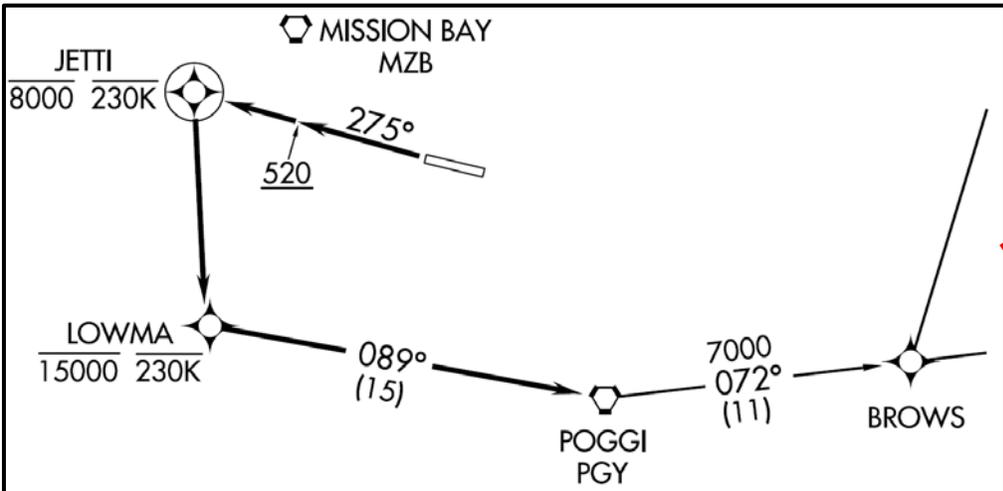
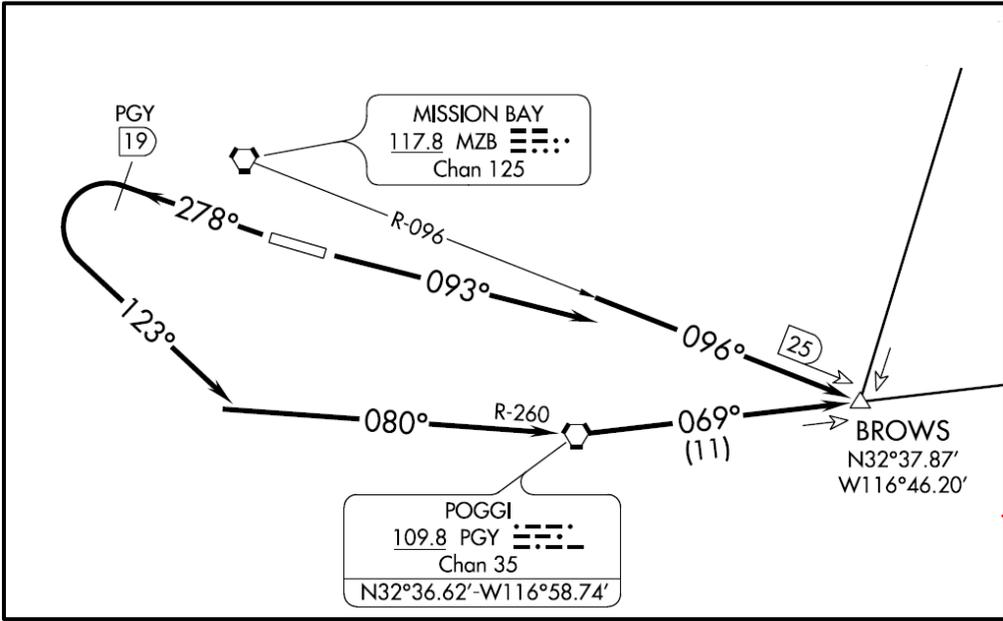
JET
8000

LC
1500

MISSION BAY

sid	apt_id	ica	sid	proc	id	route	il	route	transition	sequence	ath	term	turn	direc	ob	mag	waypoint	waypoint	waypoint	wa
KSAN	K2	BRDR7	IPL		3					18000	010	IF					BROWS	K2	EA	
KSAN	K2	BRDR7	IPL		3						020	TF					IPL	K2		
KSAN	K2	BRDR7	JLI		3					18000	010	IF					BROWS			E
KSAN	K2	BRDR7	JLI		3						020	TF							D	VE
KSAN	K2	BRDR7	RW09		1					18000	010	VA								
KSAN	K2	BRDR7	RW09		1						015	VI								
KSAN	K2	BRDR7	RW09		1						020	CF				000.0	BROWS	K2	EA	EE
KSAN	K2	BRDR7	RW27		1					18000	010	VA				275.0				
KSAN	K2	BRDR7	RW27		1						020	VD				278.0				
KSAN	K2	BRDR7	RW27		1						030	VI	L			123.0				
KSAN	K2	BRDR7	RW27		1						040	CF				080.0	PGY	K2	D	V
KSAN	K2	BRDR7	RW27		1						050	TF					BROWS	K2	EA	EE

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When ready for Takeoff, ATC issues: "Aircraft 123, Runway 27, Cleared for Takeoff"



Takeoff



What happens on Takeoff:

- Pilot accelerates until takeoff speed
- Rotates the aircraft
- The aircraft directs the first line of code: Climb to an altitude

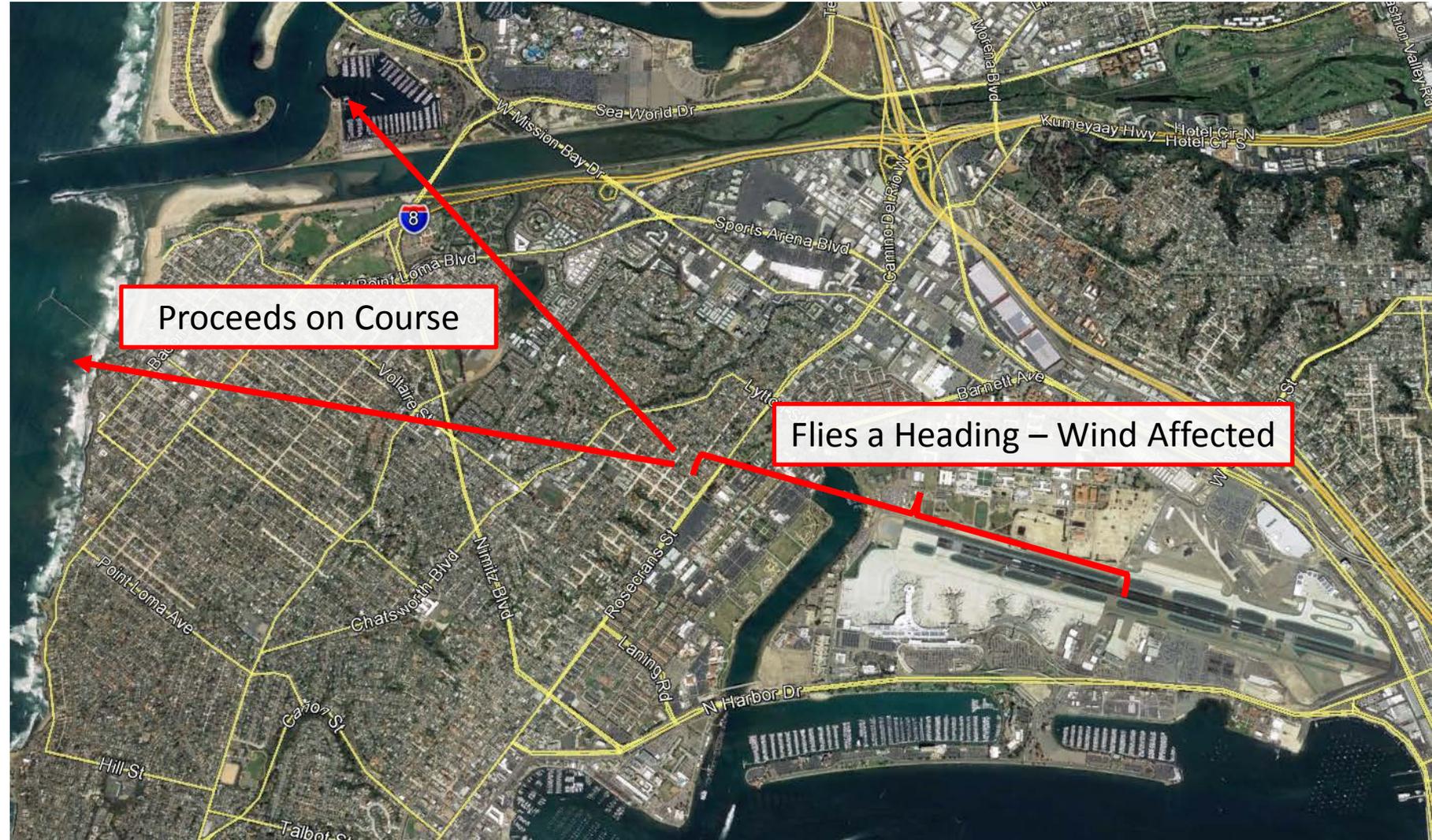


Takeoff



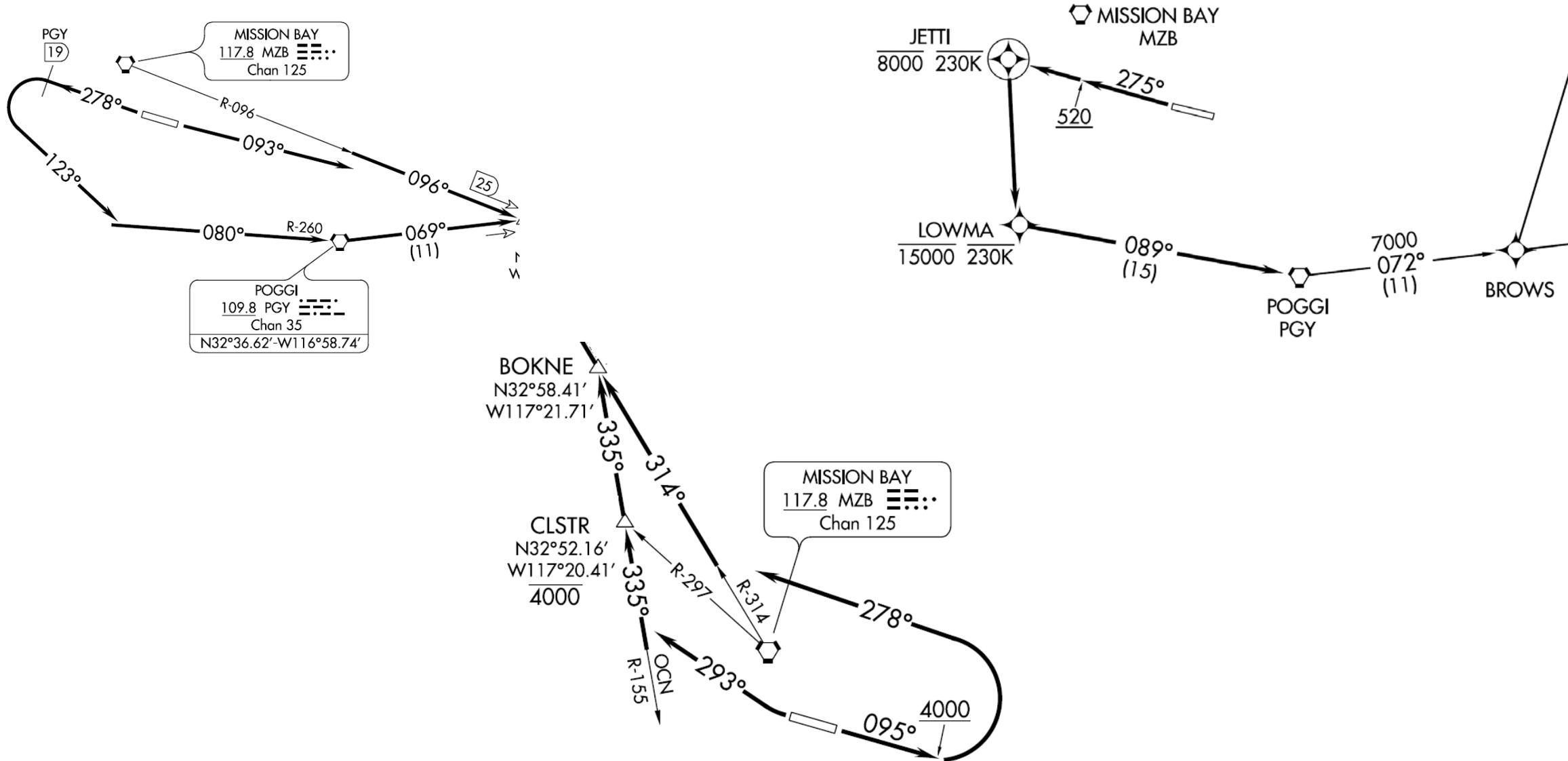
What happens on Takeoff:

- When the altitude is reached, the aircraft commands the next line of code: Go direct to....
- Tower hands aircraft off to Departure control
- Departure and the Pilot work together to navigate away from the Airport



These lines are for illustration purposes only.

Noise Dots



Has something changed? Is something going to change?



https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/

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Instrument Flight Procedures Information Gateway

The IFP Information Gateway is your centralized instrument flight procedures data portal, providing a single-source for:

- **Charts** — All Published Charts, Volume, and Type.
- **IFP Production Plan** — Current IFPs under Development or Amendments with Tentative Publication Date and Status.
- **IFP Coordination** — All coordinated developed/amended procedure forms forwarded to Flight Check or Charting for publication.
- **IFP Documents - Navigation Database Review (NDBR)** — Repository and Source Documents used for Data Validation of Coded IFPs.

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SAN SAN DIEGO/SAN

Notify me of changes to SAN

Charts (21) IFP Production

Charts - All Published Charts

9-AMC-Aerochart@faa.gov g.boyce@abcx2.com 1:01 AM

FAA Instrument Flight Procedures Information Gateway Stage/Status Change: SID ZZ000 (RNAV) ONE SAN DIEGO CA KSAN for SAN, SA...

09/26/2016

Grady Boyce
g.boyce@abcx2.com

Dear Grady:

IFP Information Gateway Instrument Flight Procedure (IFP) Project Stage/Status Change: DEV to Charting

This is a courtesy notification that the SID ZZ000 (RNAV) ONE SAN DIEGO CA KSAN for SAN, SAN DIEGO, CA - NEW - has been updated for Estimated Chart Date: 11/10/2016.

You can follow this link to view the current procedure:

http://www.faa.gov/air_traffic/flight_info/aeronav/procedures/application/index.cfm?event=procedure.results&tab=productionPlan&nasrId=SAN

Regards,

Production Strategy and Planning Team
6500 South MacArthur Blvd. ANF-1 Building 5, Room 102
Oklahoma City, OK 73169
Office: 405-954-3027
9-AMC-Aerochart@faa.gov
[Visit AeroNav Products Here](#)

Stage and Status Definitions:

Stage:

- FPT** - Procedures are coordinated with Air Traffic, Tech Ops and Airports for feasibility, preparation and priority (FPO)
- DEV** - Development of the procedures
- FC** - FAA Flight Inspection of the developed procedures
- PIT** - Production Integration Team (TS)
- CHARTING** - Procedures at AeroNav Products Charting for publication (NACO)

Status:

- At Flight Check - At Flight Inspection for procedure validation
- Awaiting Publication - At AeroNav Products Charting for publication
- Complete - Procedure development action finished
- On Hold - Procedure waiting data/information to allow it to proceed/continue to next stage
- Pending - Procedure development work on-going
- Published - Procedure charted and published
- Under Development - Procedure is being worked on by the FAA
- Terminated - Procedure/project terminated

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Questions?

