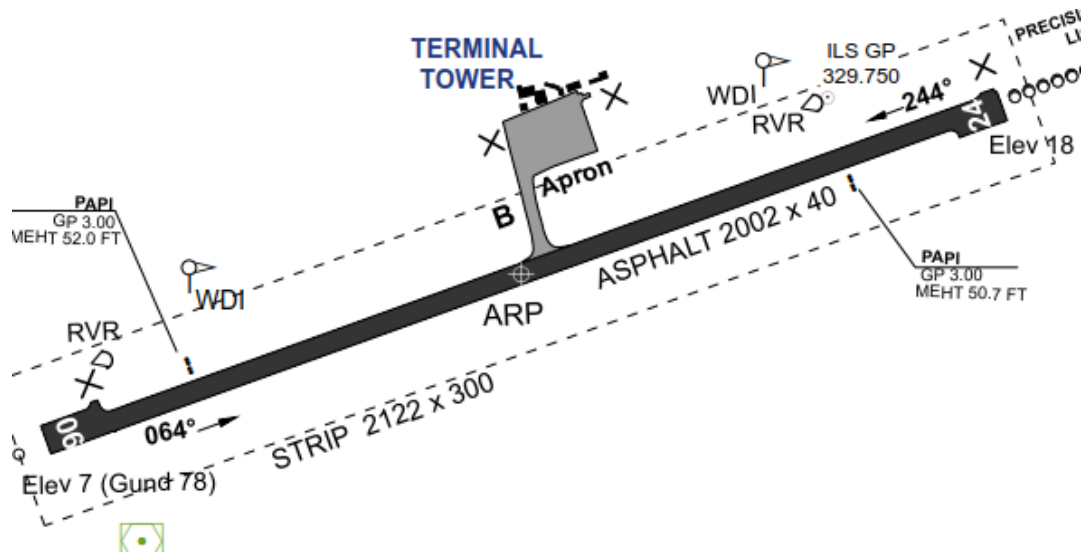


Example how to calculate a new point between Origin and Destination

We will calculate and verify coordinates for aircraft take-off position along the runway. In this example using EVLA runway 24 and intersection take-off from TWY B.

- Source data taken from AIP LATVIA, EVLA — LIEPAJA , runway 06/24
- source <https://ais.lgs.lv/aiseaip>



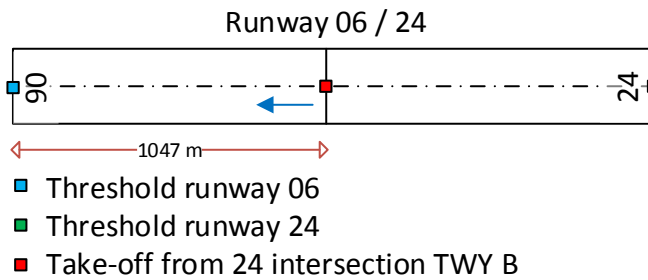
EVLA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

RWY designator	True BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR coordinates, RWY end coordinates, THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP of precision APP RWY
1	2	3	4	5	6
06	070.30°	2002 x 40	46/F/B/X/T ASPH	563052.18N 0210454.24E - GUND 78 FT	THR 7 FT -
24	250.32°	2002 x 40	46/F/B/X/T ASPH	563113.99N 0210644.48E - GUND 78.1 FT	THR 17.7 FT -

EVLA AD 2.13 DECLARED DISTANCES

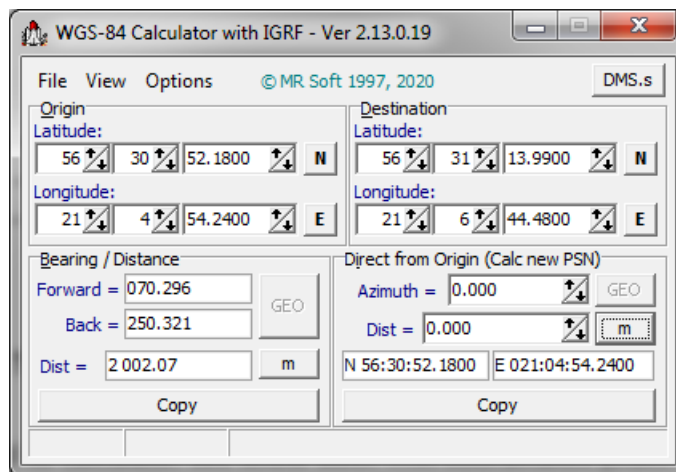
RWY designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
06	2002	2002	2002	2002	NIL
06	955	955	955	-	Take-off from intersection with TWY B
24	2002	2002	2002	2002	NIL
24	1047	1047	1047	-	Take-off from intersection with TWY B

2. Clarify what we are calculating



Red marker is the position we need to calculate. We know both THR coordinates (from table EVLA AD 2.12) and Take-off run available (from table EVLA AD 2.13, TORA).

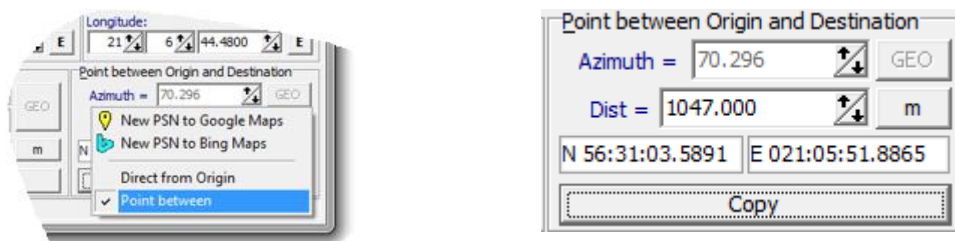
3. Let's fill calculator with these details



Calculated total runway length is 2002.07 m, table AD 2.12 has 2002 m
 True bearing of runway dir 06-24 is 070.296°, table AD 2.12 has 070.30°
 True bearing of runway dir 24-06 is 250.321°, table AD 2.12 has 250.32°
 Notice that difference between bearings is not 180°

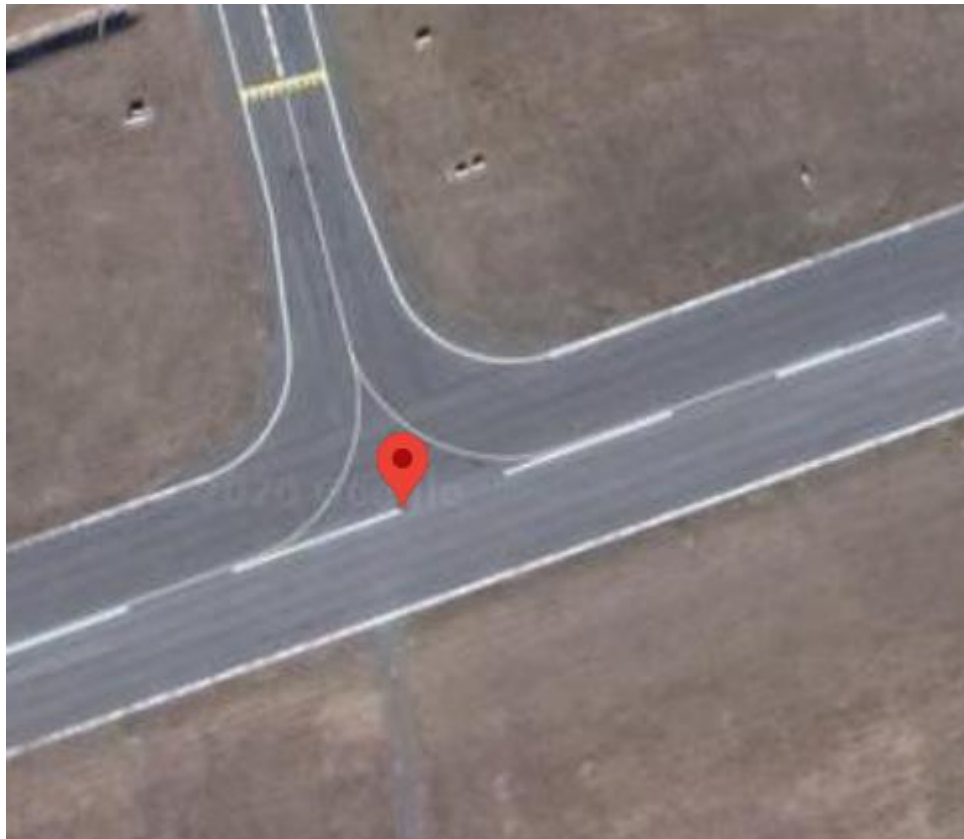
4. Change calculated point mode to "Point between".

- Azimuth is now locked, set distance to 1047 m



- Calculated new point is 563103.5891N 0210551.8865E

5. Send this new calculated point to Google Maps to verify calculations



6. Same position to Bing Maps

