



Next-generation University of Wyoming King Air Research Aircraft Facility

Mission Performance and Planning

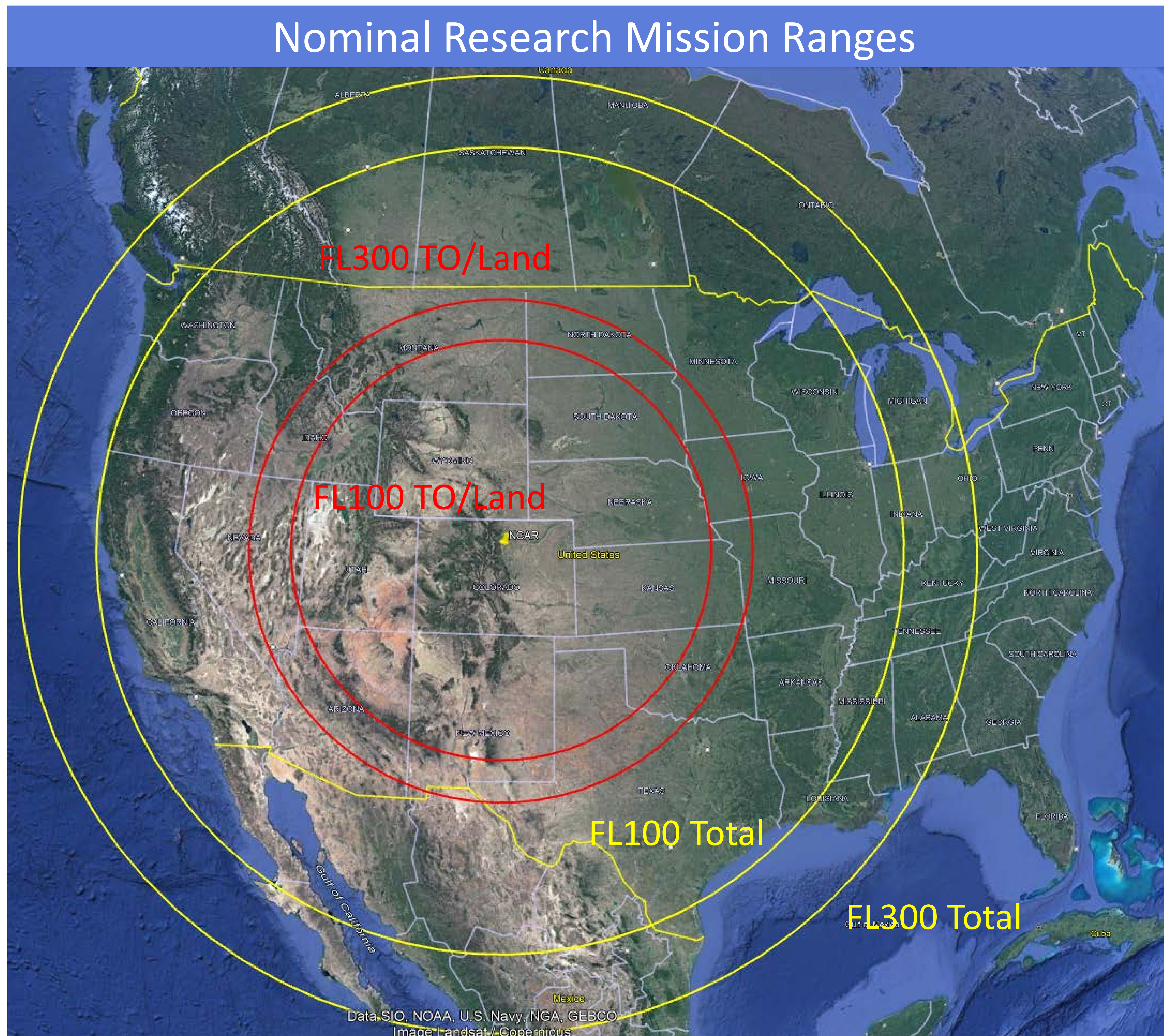


NSF Projects Supported: 2004 -- 2023

- 37 projects
- 2100 flight hours
- 79 PIs and co-PIs
- 14 states
- 4 countries
- 2 non-UW aircraft

Aircraft operations

- Domestic
- International
 - Atlantic & Pacific Ferry Possible
- 33,000-35,000 ft ceiling
- 200 ft AGL min operating altitude (w/ waiver and risk assessment)



Performance Metrics (2300# payload, 3900# fuel)*			
ALT [Ft]	Tot. Time [Hr]	Tot. Dist. [nm]	Max Dist. TO/Land [nm]
SL	3.3	677	339
2000	3.4	710	355
4000	3.5	739	370
10000	3.9	866	433
14000	3.9	780	390
18000	3.9	800	400
22000	3.9	840	430
26000	3.9	980	490
30000	3.9	1050	525
34000	3.9	1100	550

• Anticipated mission performance based on manufacturer charts and pre-delivery flight testing. External stores / instruments will reduce these values. These examples are for informational purposes only and should not be relied upon for any formal use. Contact UWKA Facility personnel for project specific guidance.

Mission Configuration Performance Metrics*			
	Mission A: Typical Research Payload	Mission B: Maximum Endurance	Mission C: Maximum Research Payload
Payload [lb.]	2300	1300	3100
Fuel [lb.]	3900	4900	3100
Duration w/ Res. [hr.]	4.1	5.4	3.1
Range SL/FL330 [nm.]	760/1560	860/2100	580/1120



www.uwyo.edu/atsc/uwka

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