

Attachment 1

CVR events overlaid on runway 13 planform view and FDR time history plots

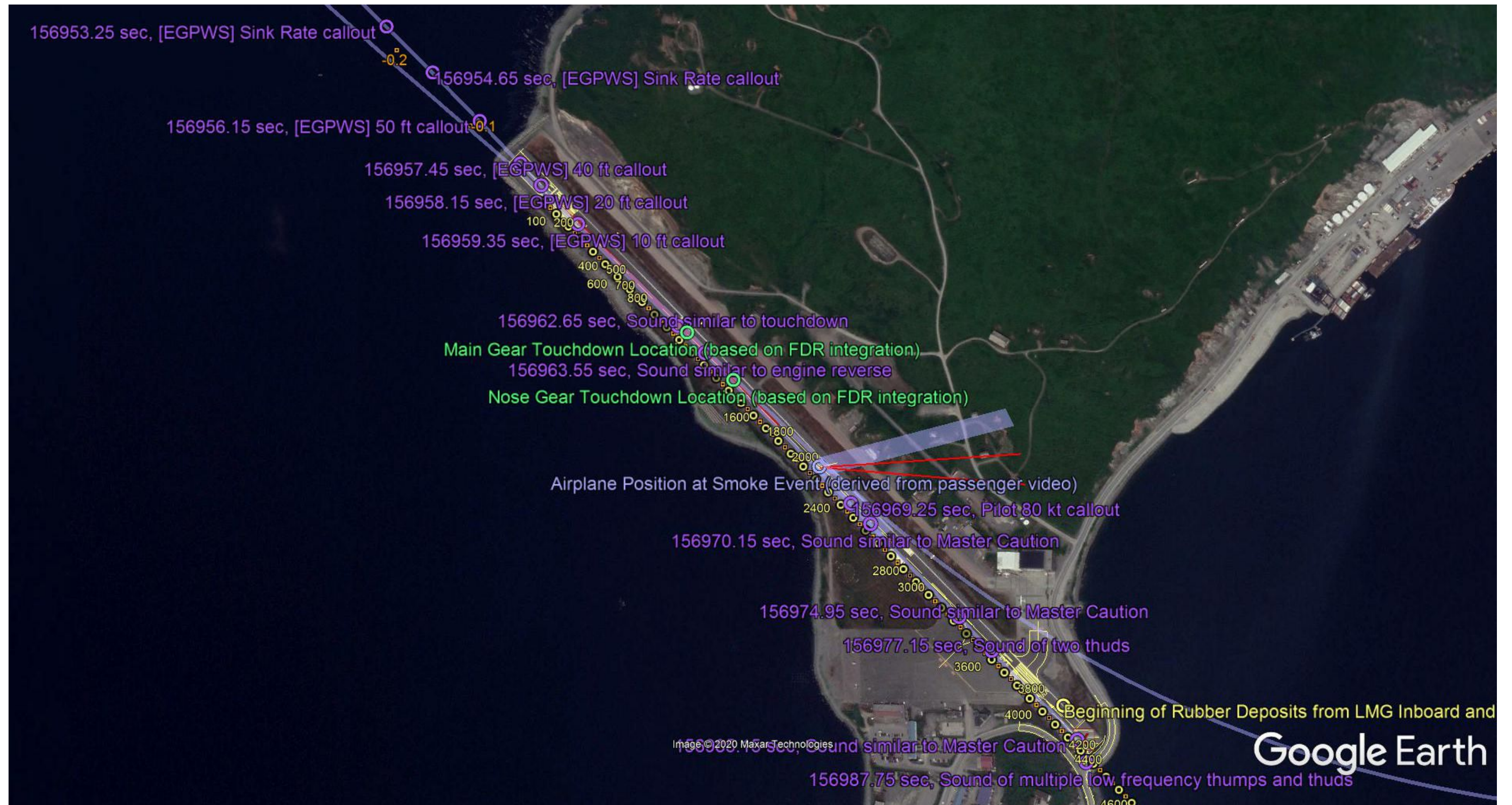


Figure A1.1: Planform view of runway 13 with N686PA sanitized CVR events (purple) annotated along the airplane ground track. True north is toward the top of the page. The CVR event time values correspond to FDR SRN.



Figure A1.2: Planform view of runway 13 arrival end with N686PA sanitized CVR events (purple), FDR ground speed in knots (yellow), and FDR anti-skid fault parameters (orange, 1=fault) annotated along the airplane ground track. True north is toward the top of the page. The respective CVR and FDR time values represent FDR SRN and FDR SRN – 156000.

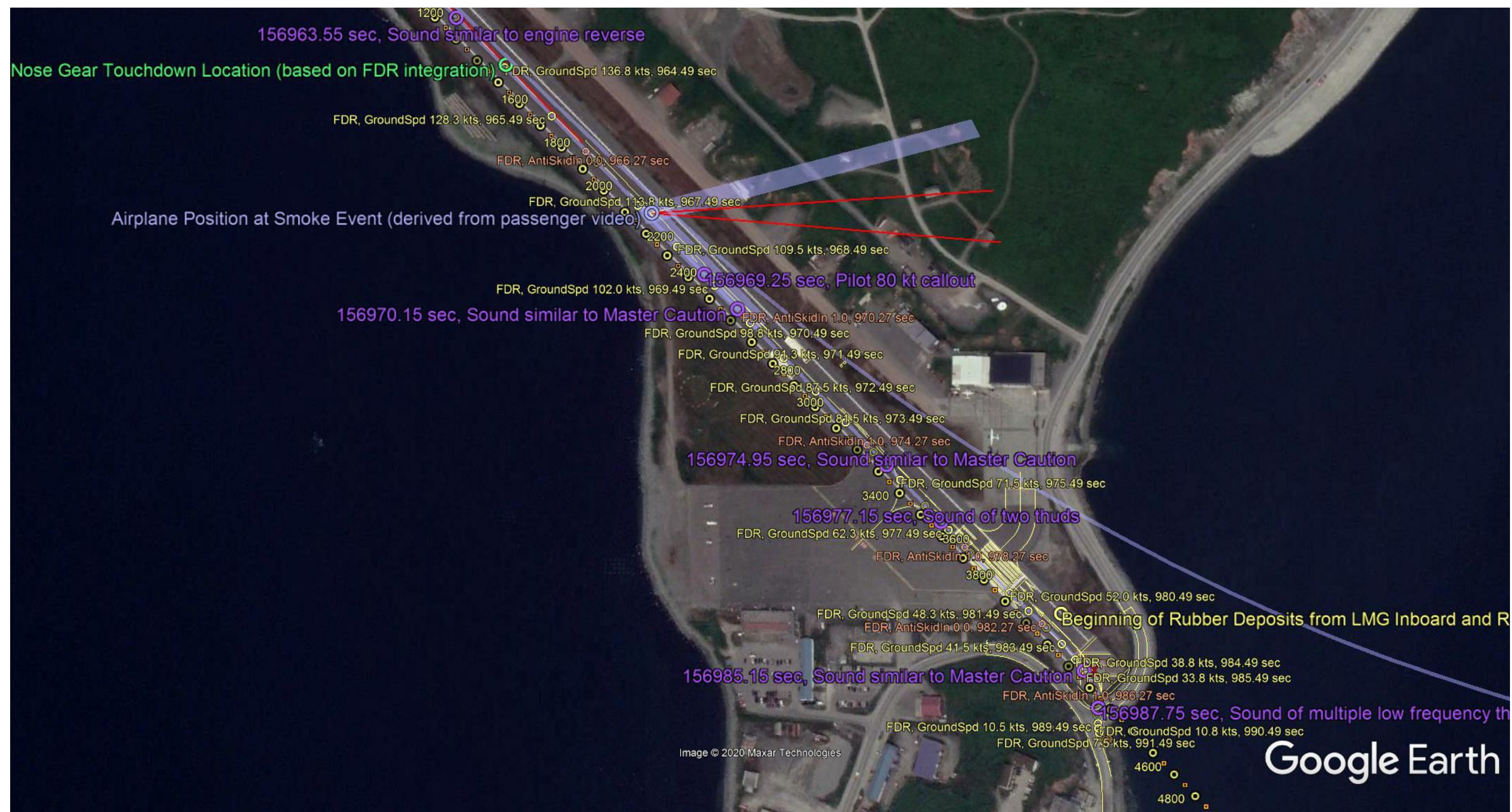
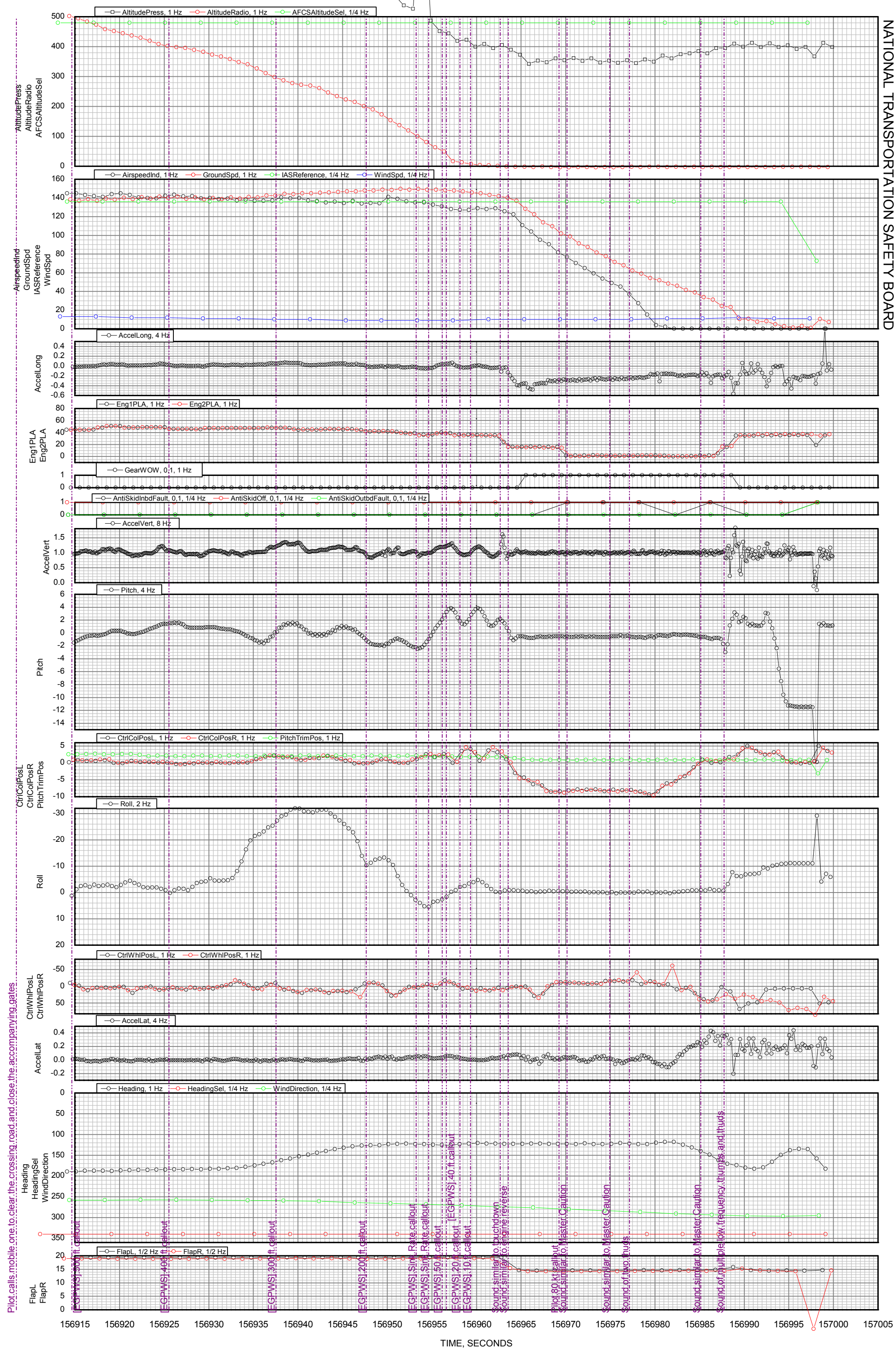


Figure A1.3: Planform view of runway 13 departure end with N686PA sanitized CVR events (purple), FDR ground speed in knots (yellow), and FDR anti-skid fault parameters (orange, 1=fault) annotated along the airplane ground track. True north is toward the top of the page. The respective CVR and FDR time values represent FDR SRN and FDR SRN – 156000.



Figure A1.5: Planform view of runway 13 departure end with N686PA FDR ground speed in knots (yellow) and FDR anti-skid fault parameters (orange, 1=fault) annotated along the airplane ground track. True north is toward the top of the page. The FDR time values correspond to FDR SRN – 156000.

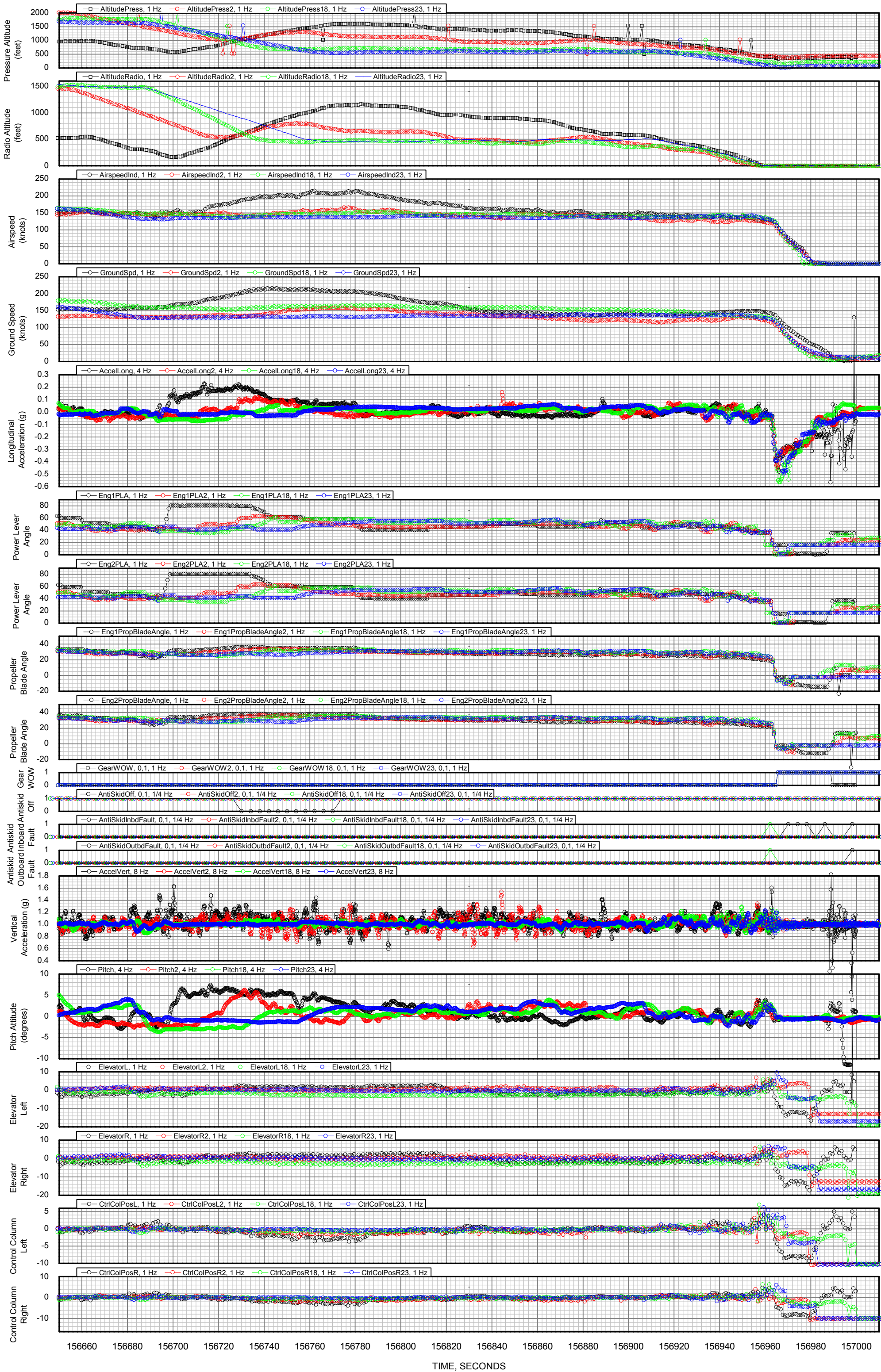
Figure A1.6: PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT)
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019



Attachment 2

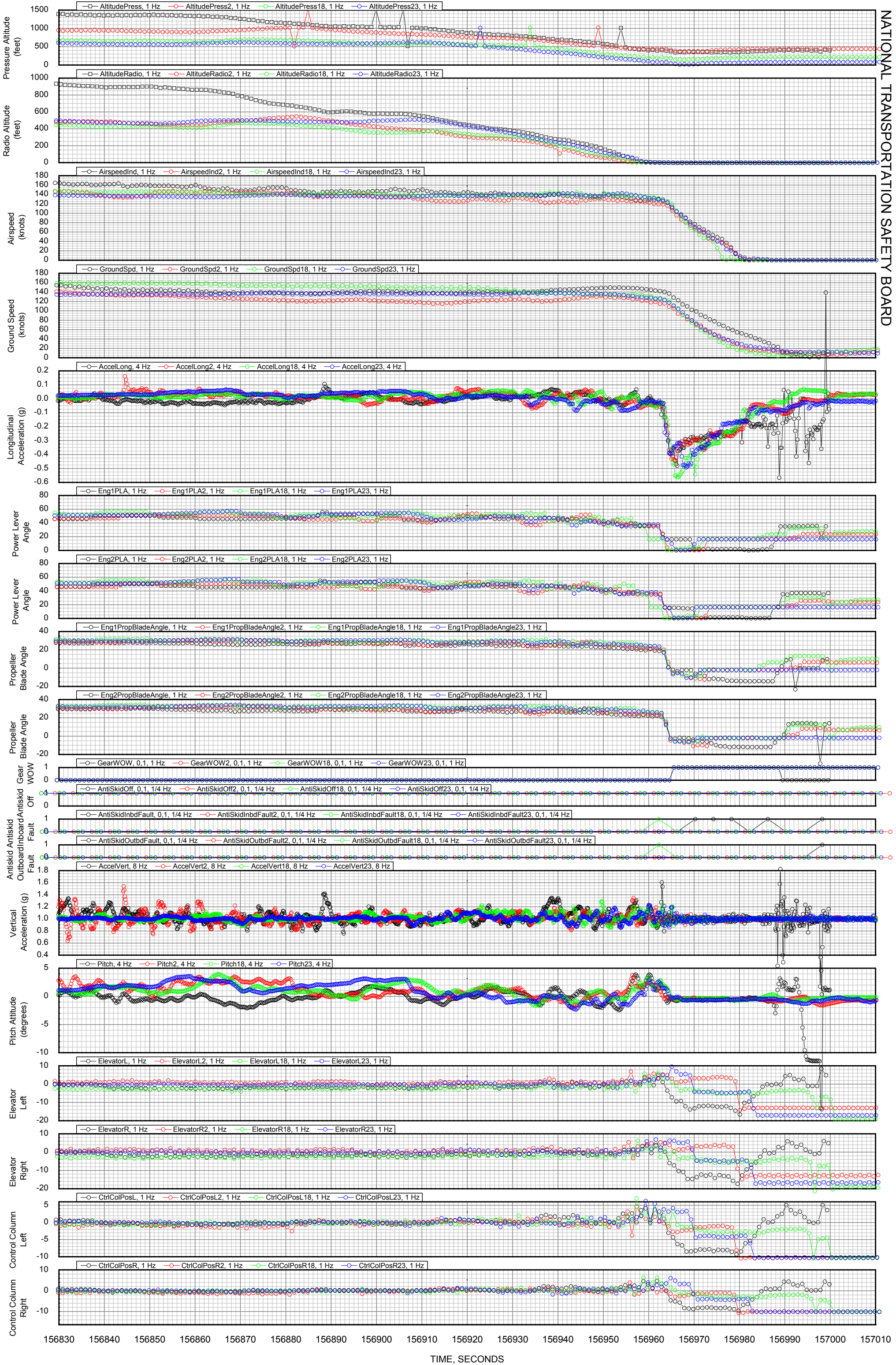
Comparison of N686PA FDR data for the accident flight and three previous DUT landings

PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA COMPARISON LANDINGS]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LONGITUDINAL PARAMETERS]

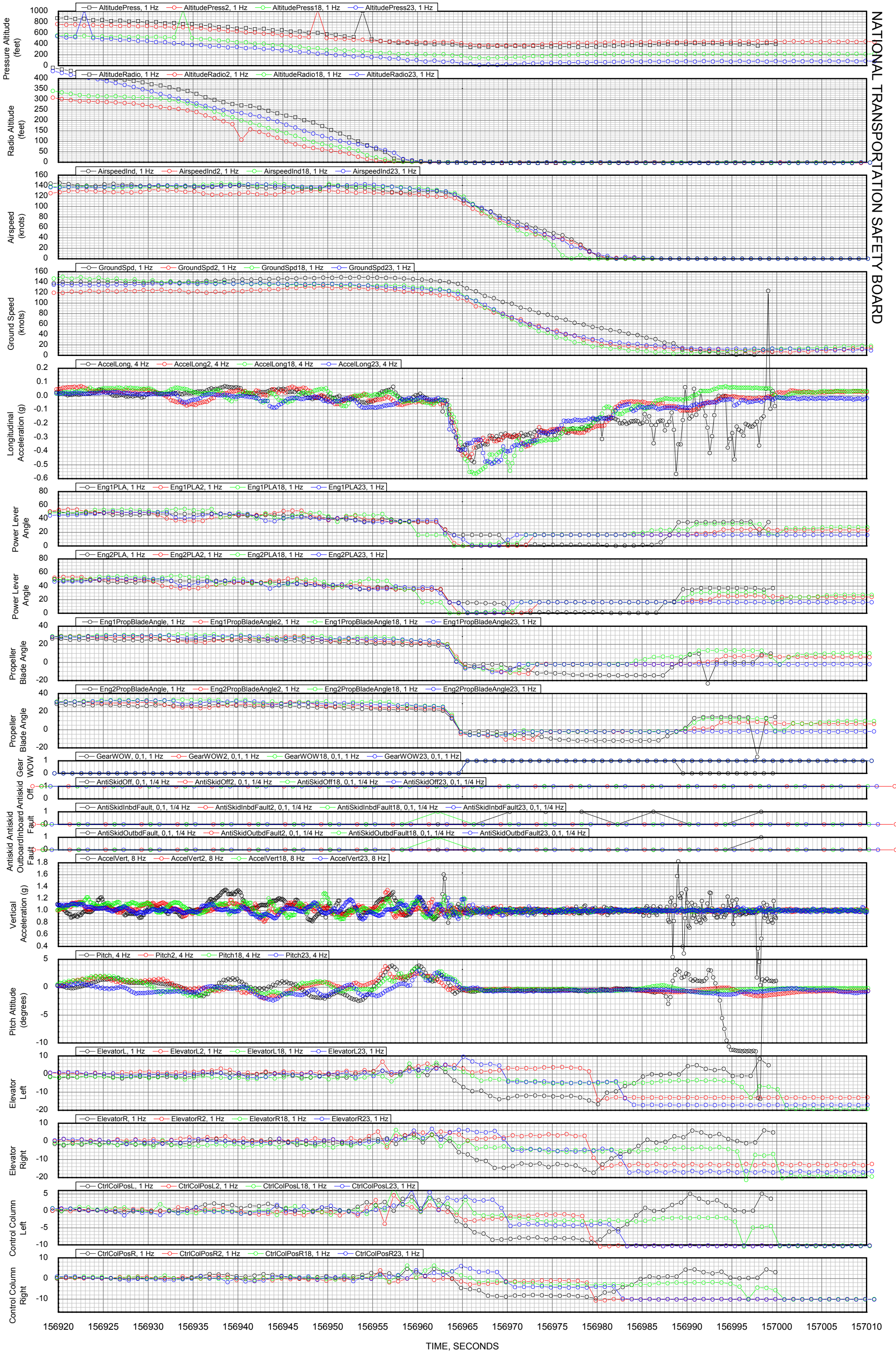


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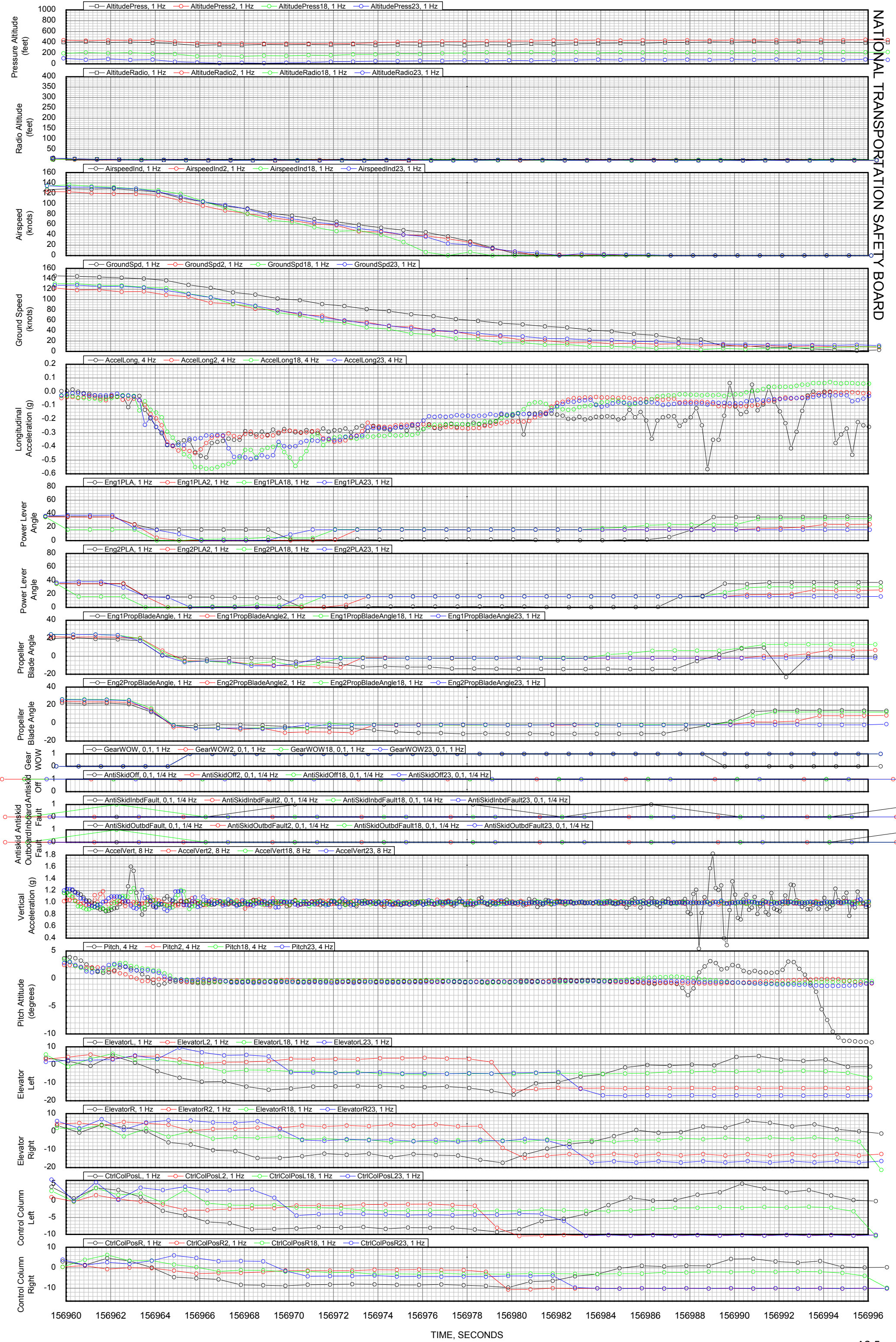
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA COMPARISON LANDINGS]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LONGITUDINAL PARAMETERS]



PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA COMPARISON LANDINGS]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LONGITUDINAL PARAMETERS]

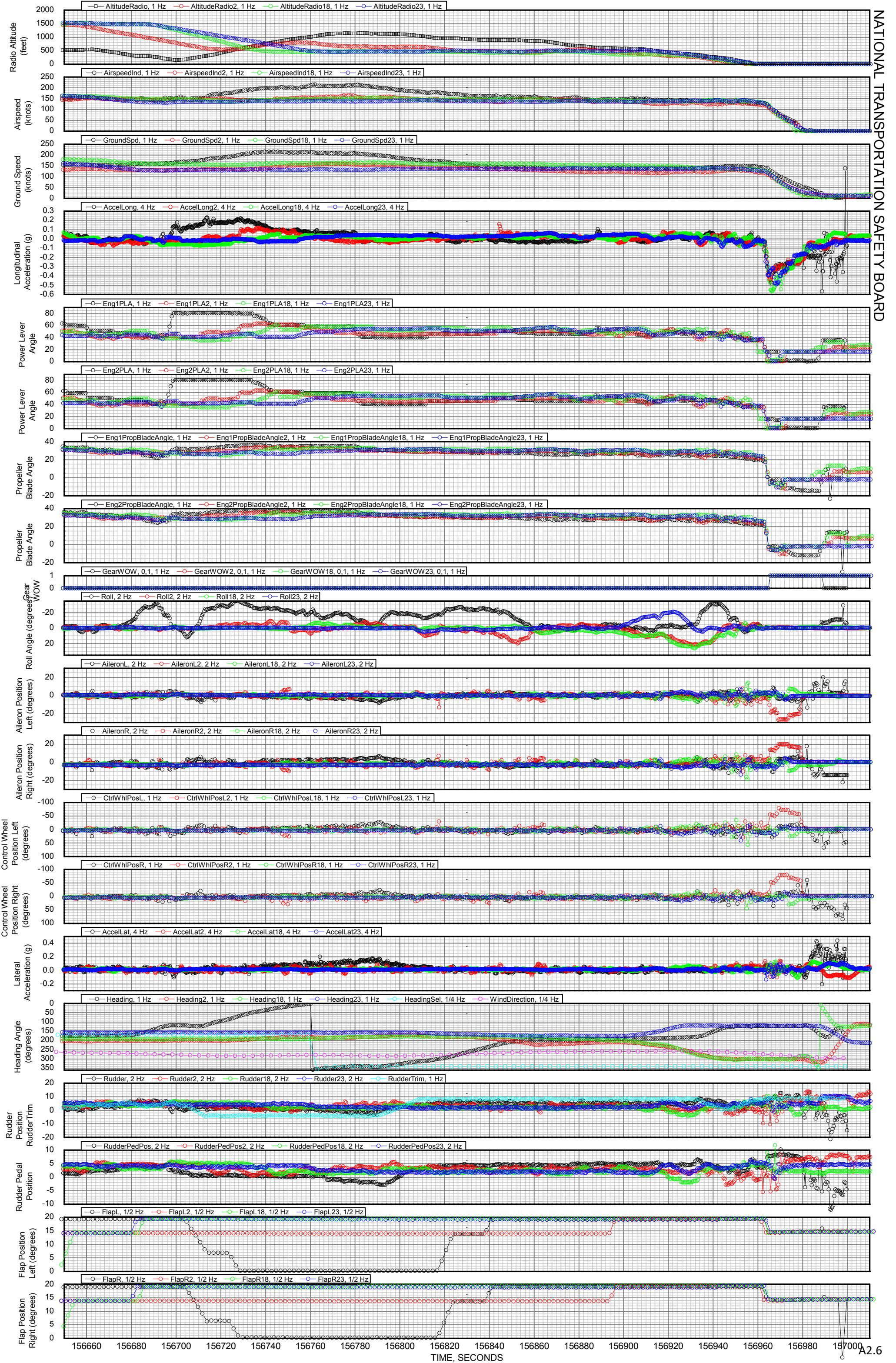


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RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LONGITUDINAL PARAMETERS]



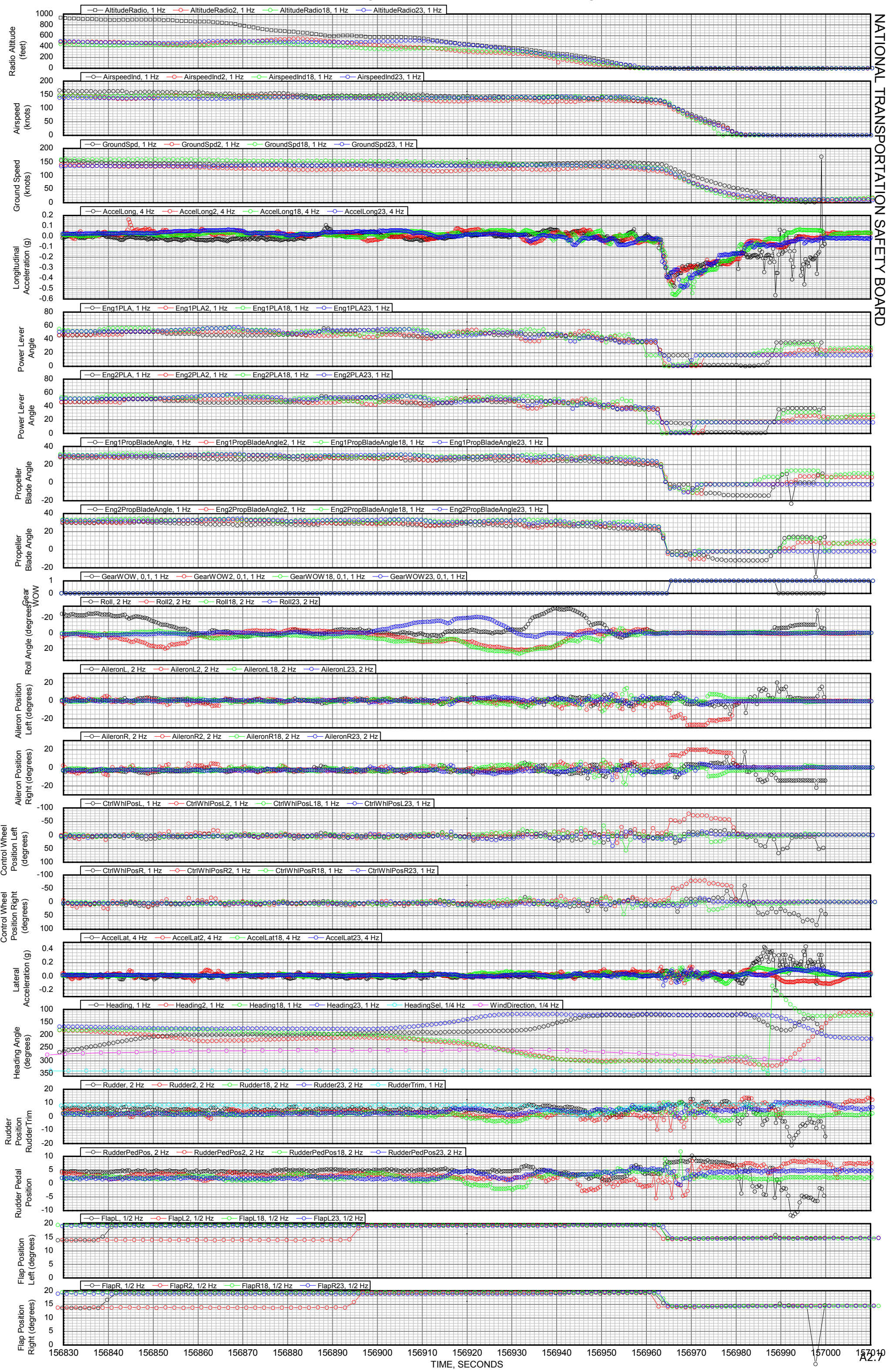
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PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LATERAL-DIRECTIONAL PARAMETERS]

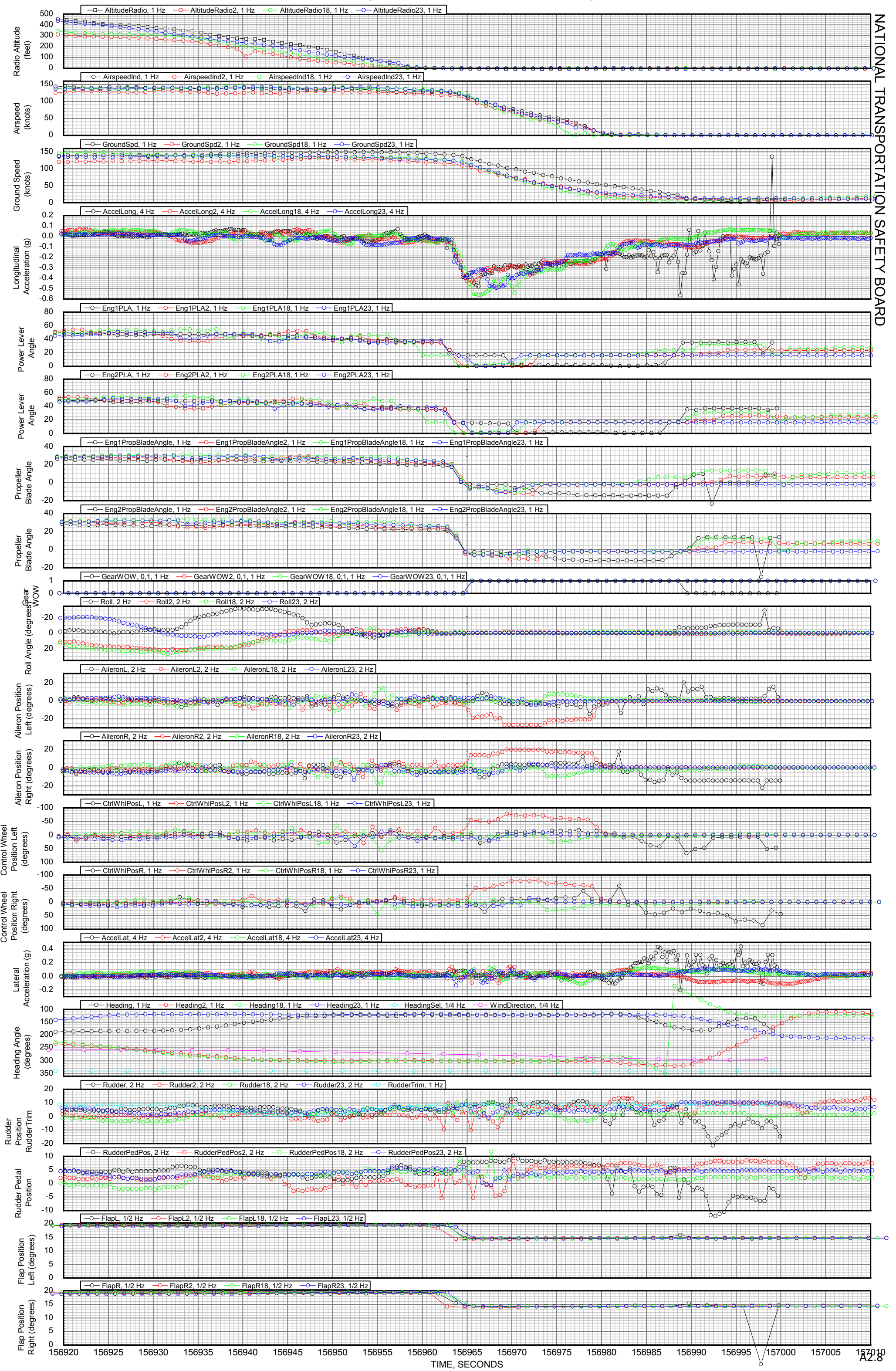


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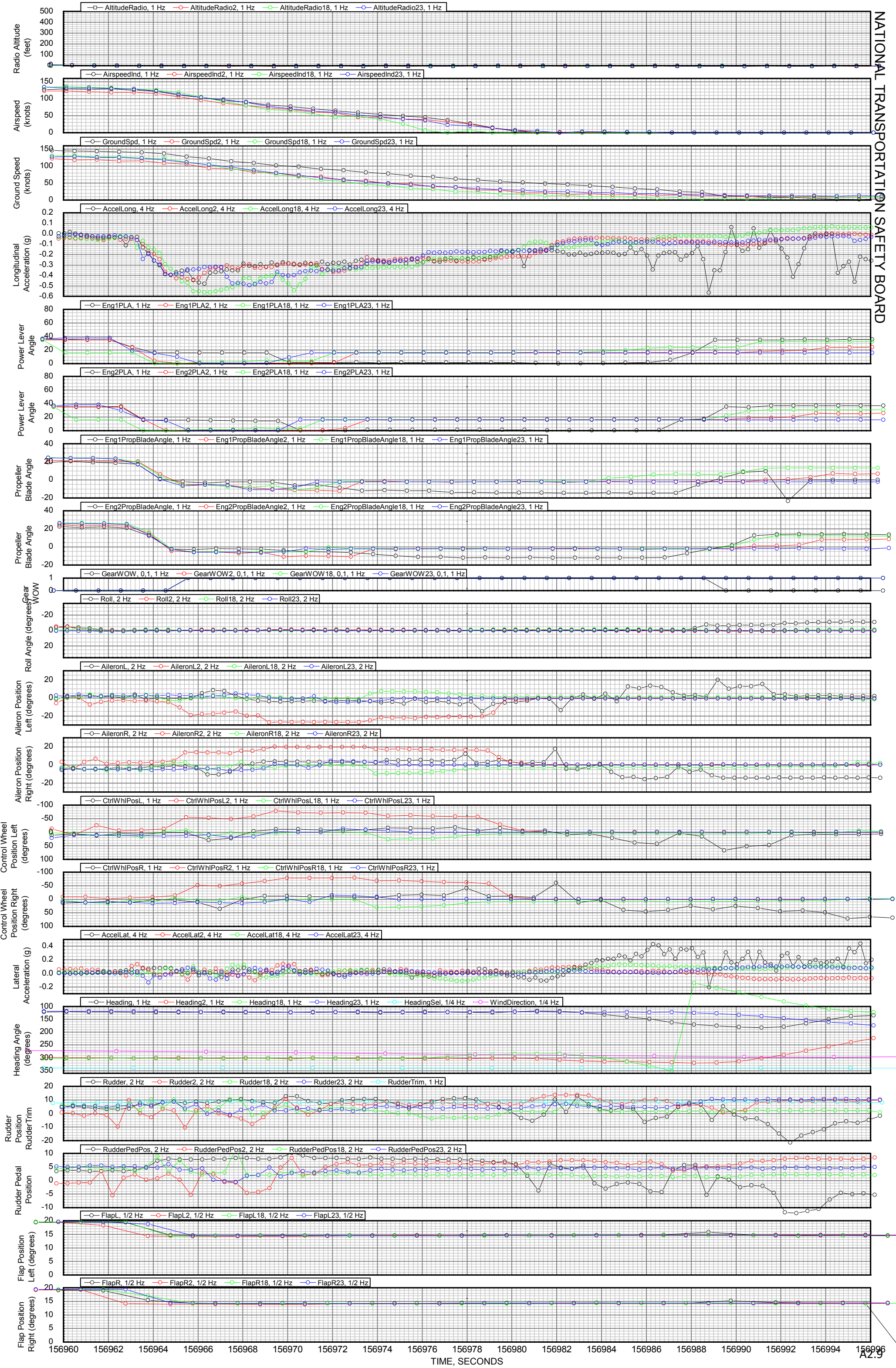
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LATERAL-DIRECTIONAL PARAMETERS]



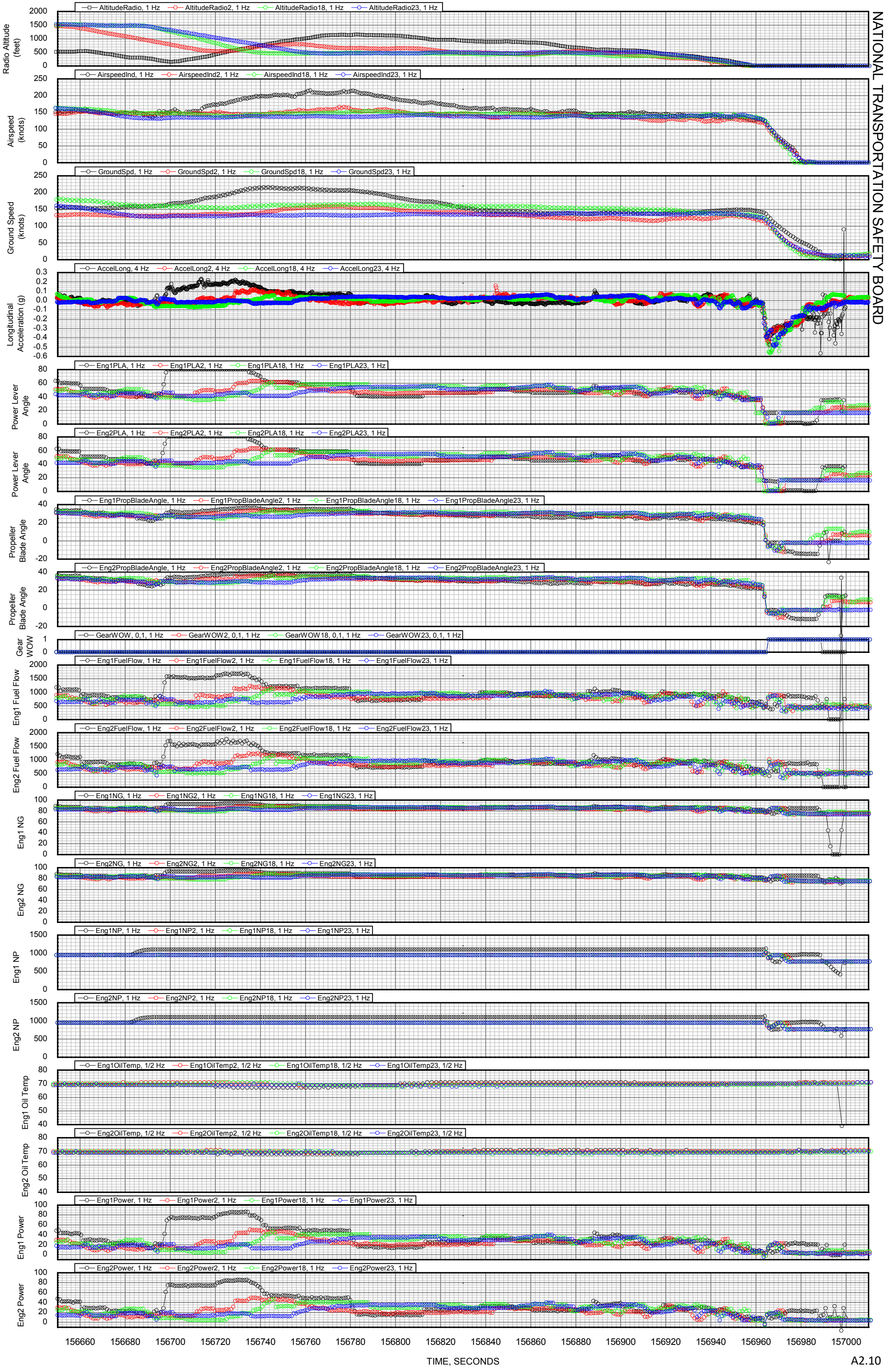
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
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RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [LATERAL-DIRECTIONAL PARAMETERS]

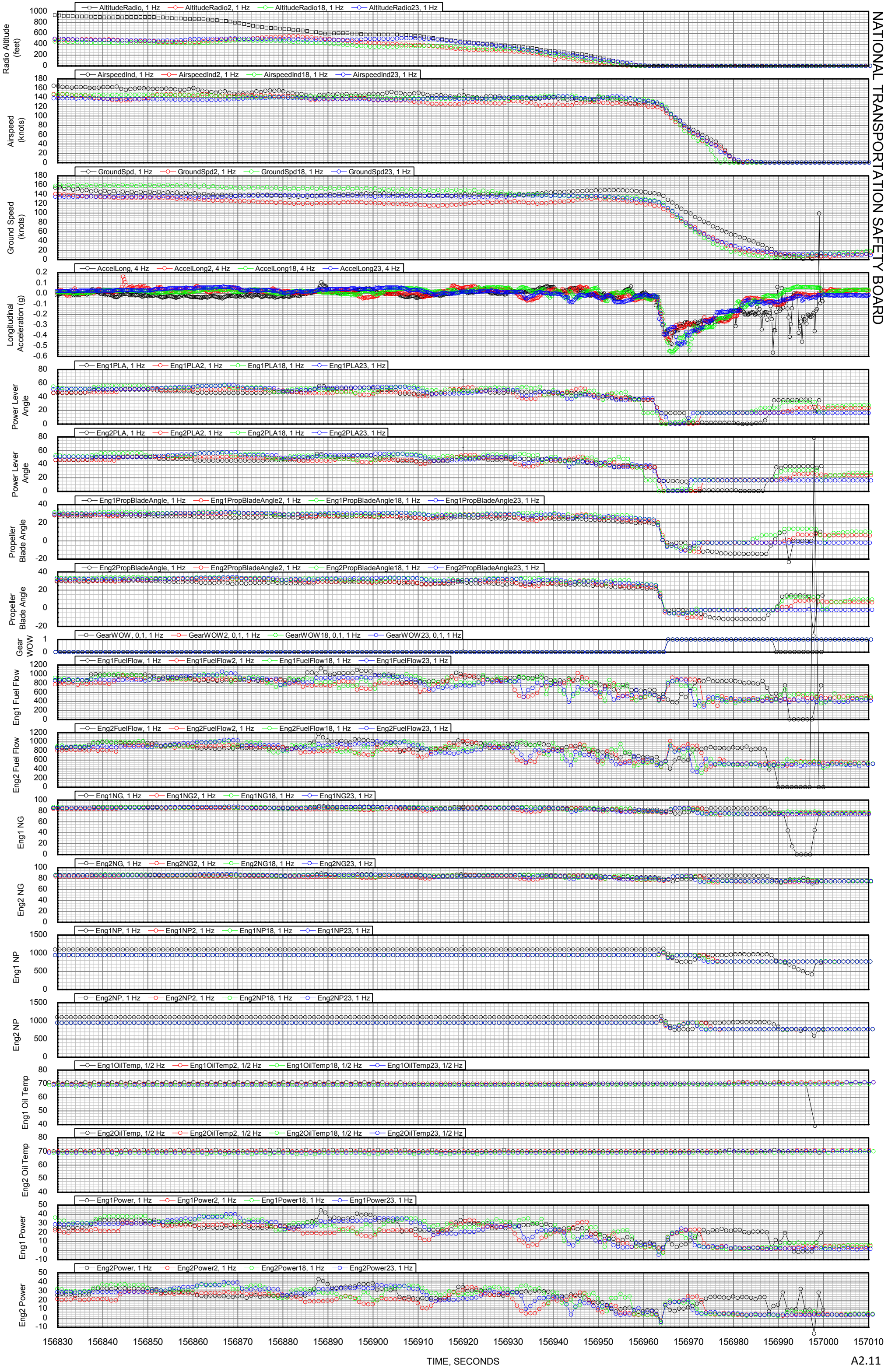


PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [ENGINE PARAMETERS]



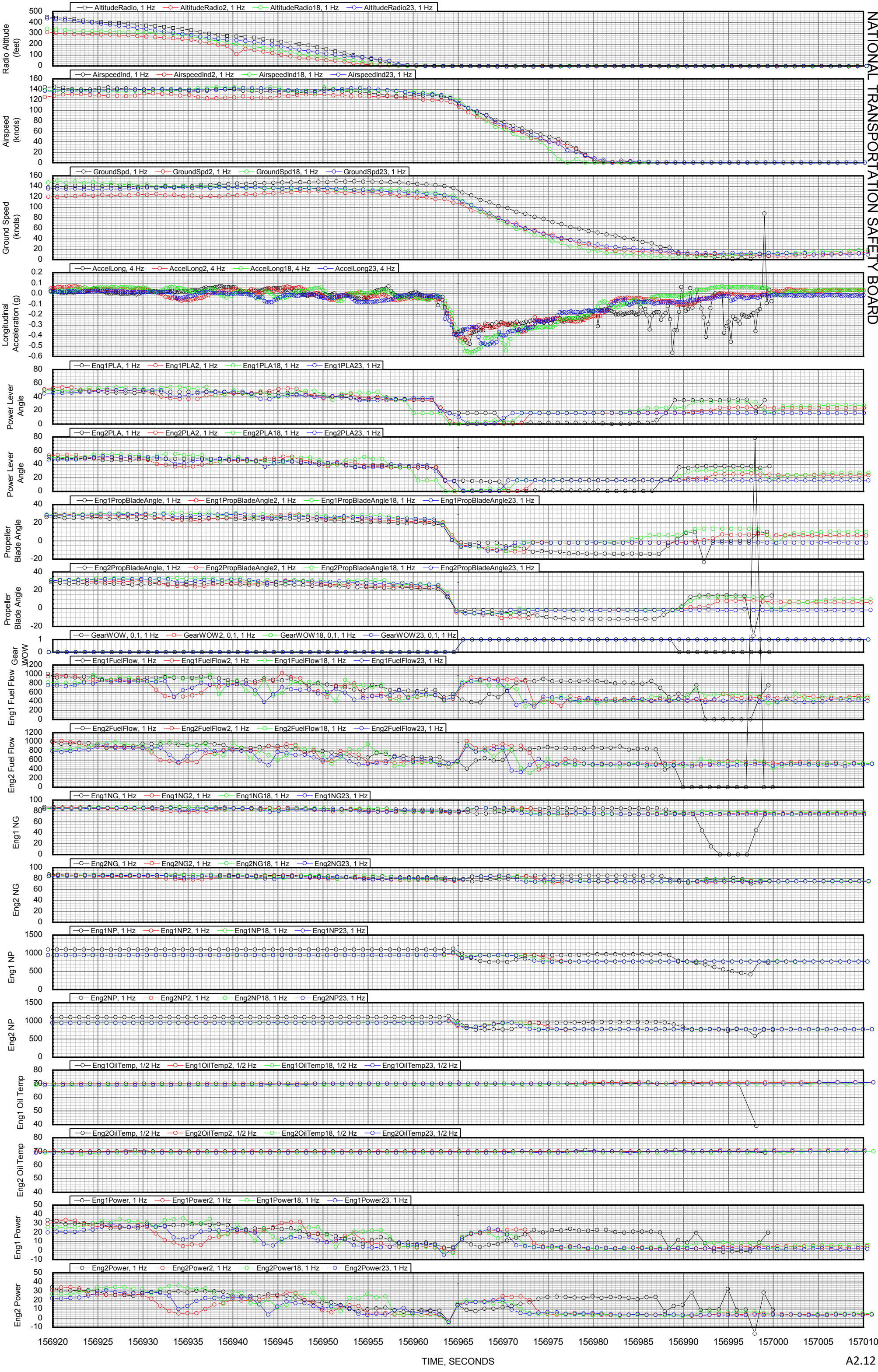
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PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
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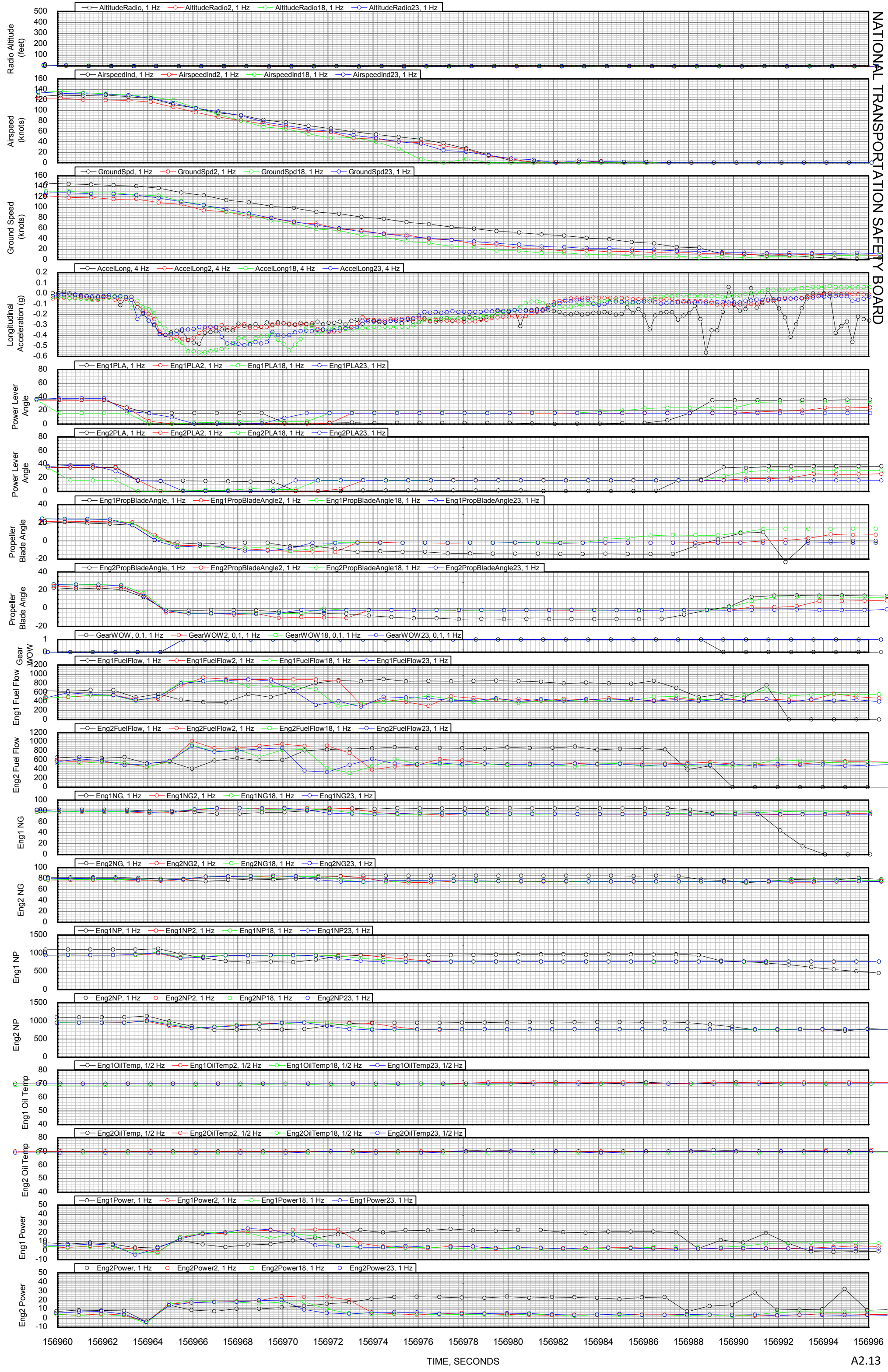
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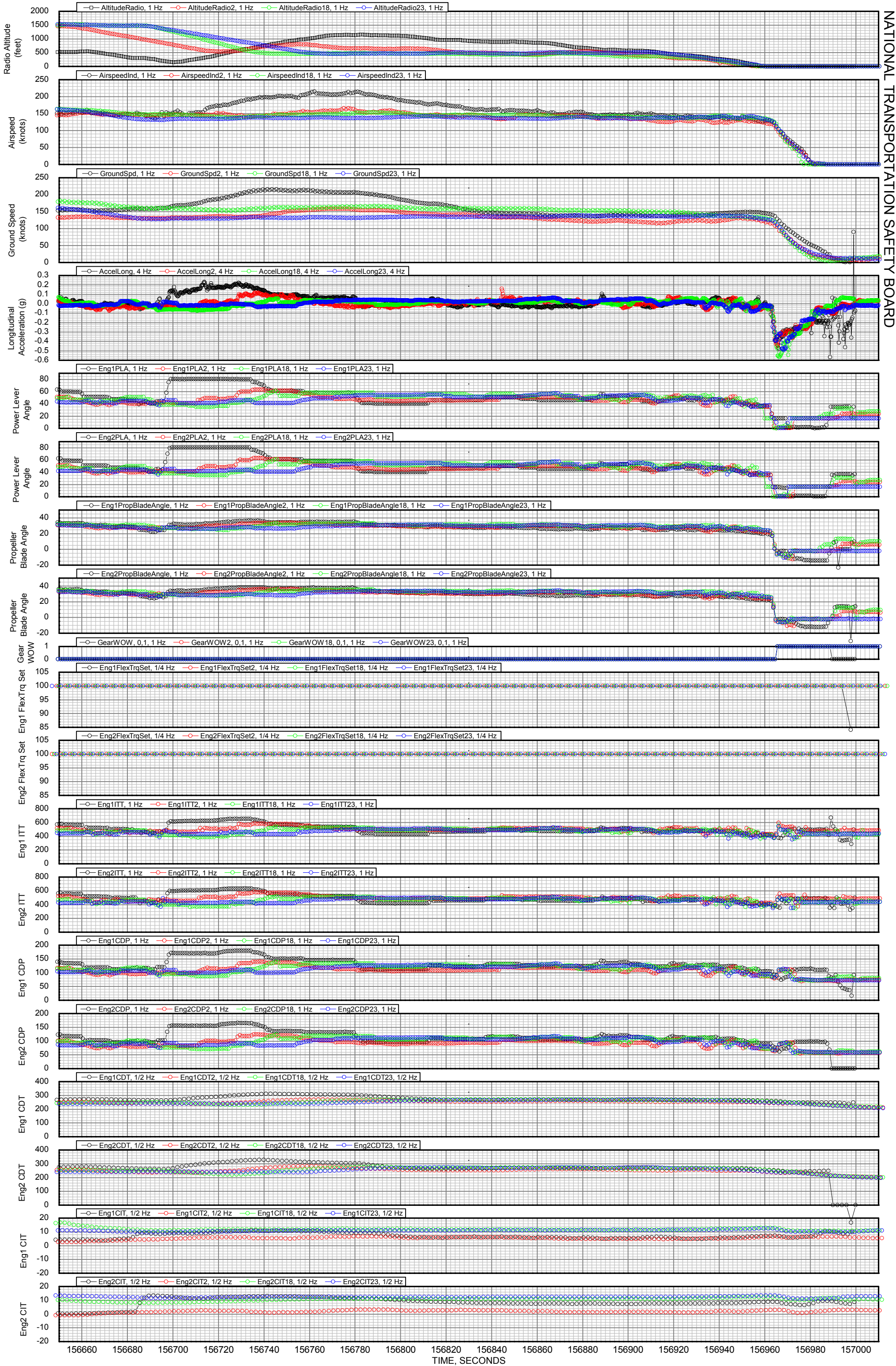


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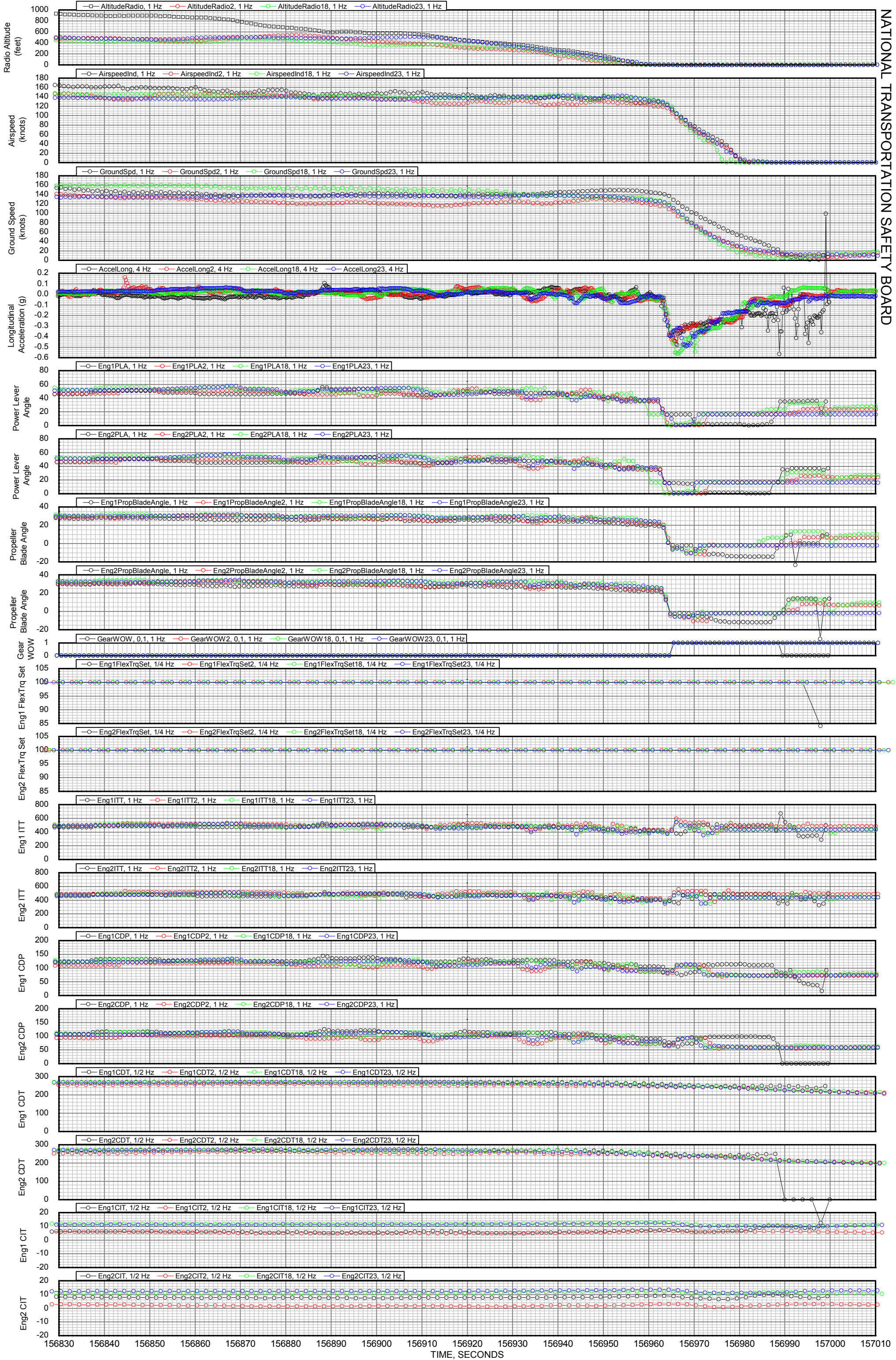
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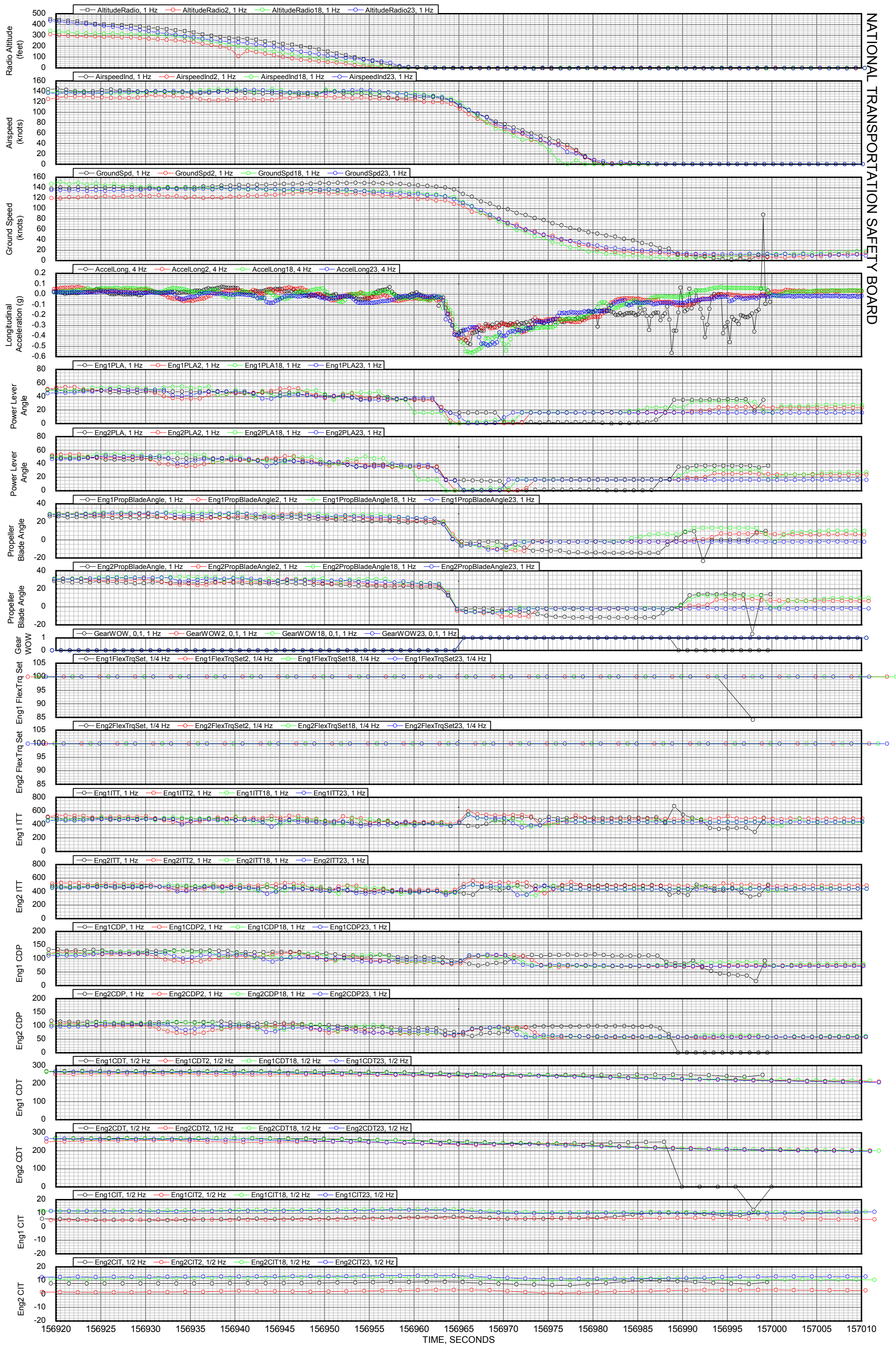


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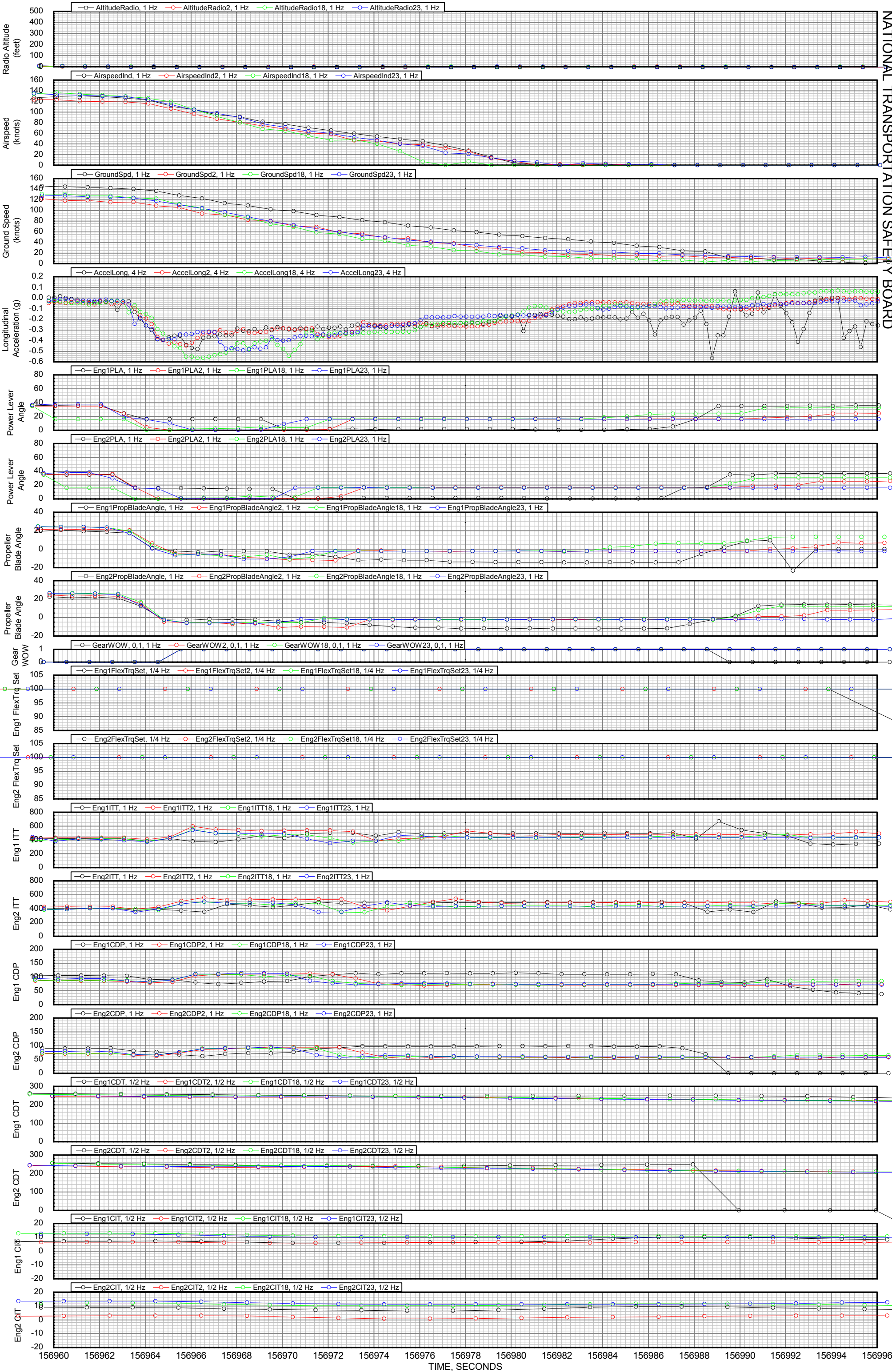


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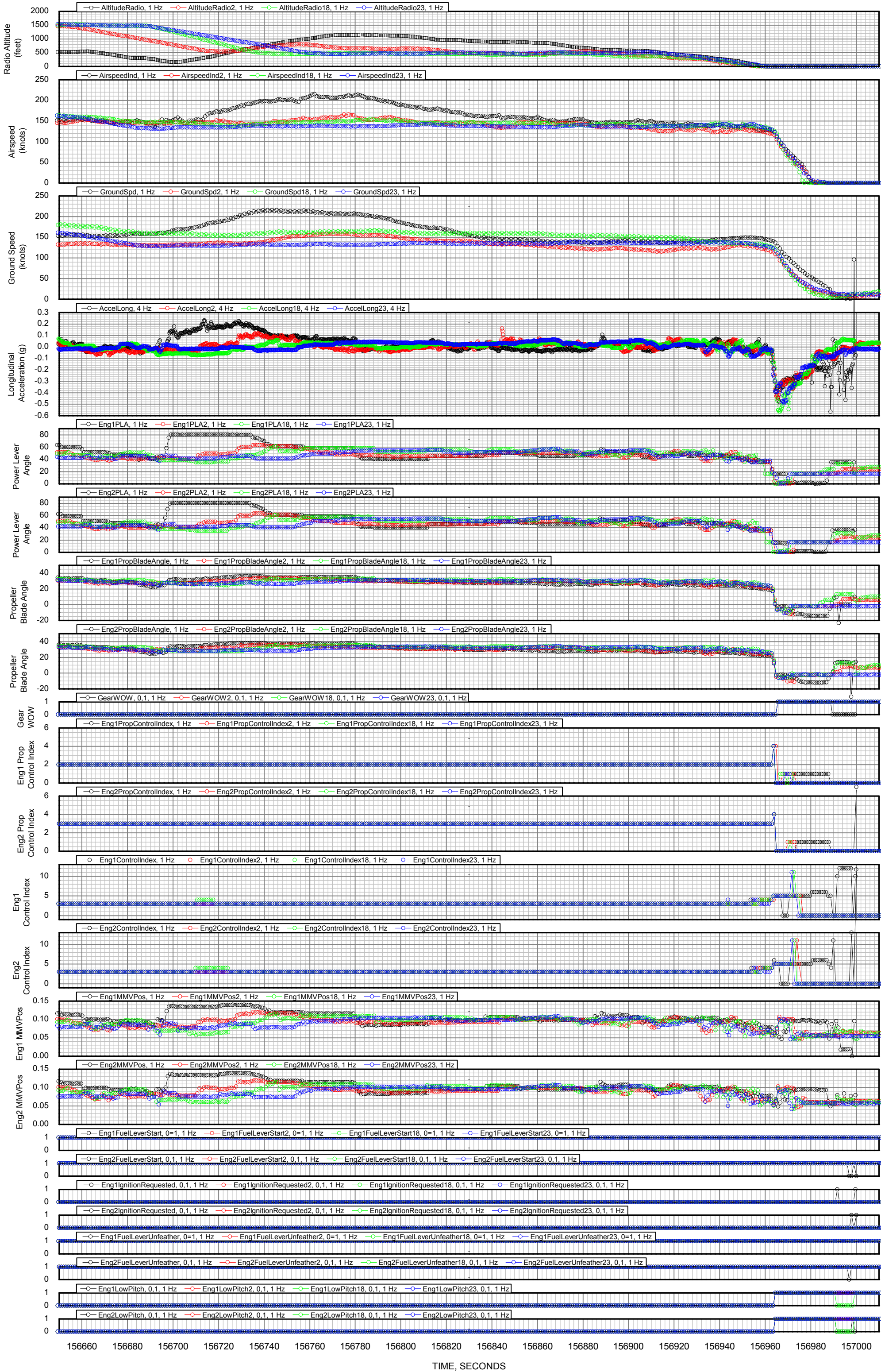


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RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [ENGINE PARAMETERS]



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RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [ENGINE PARAMETERS]



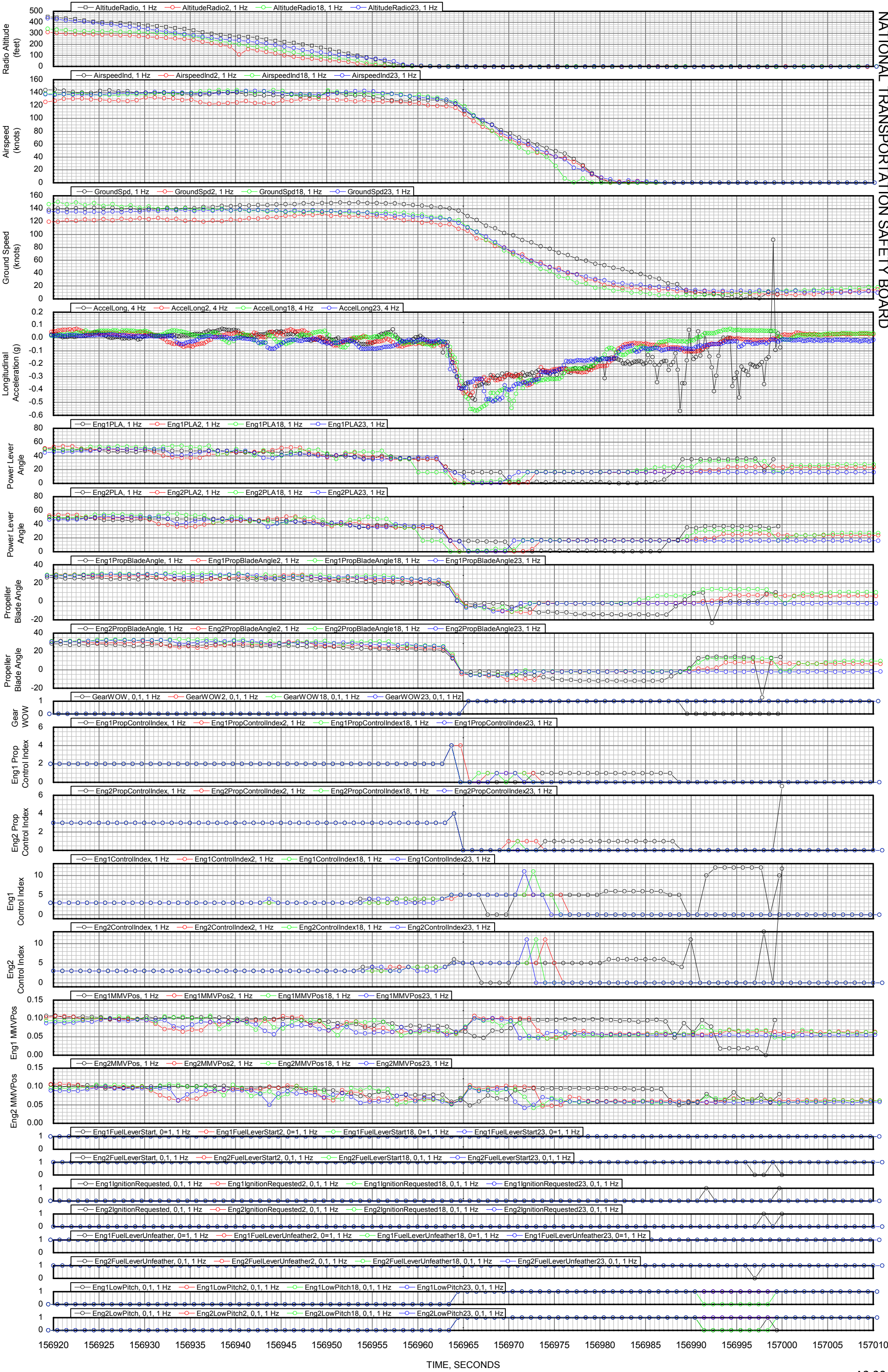
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PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [ENGINE PARAMETERS]



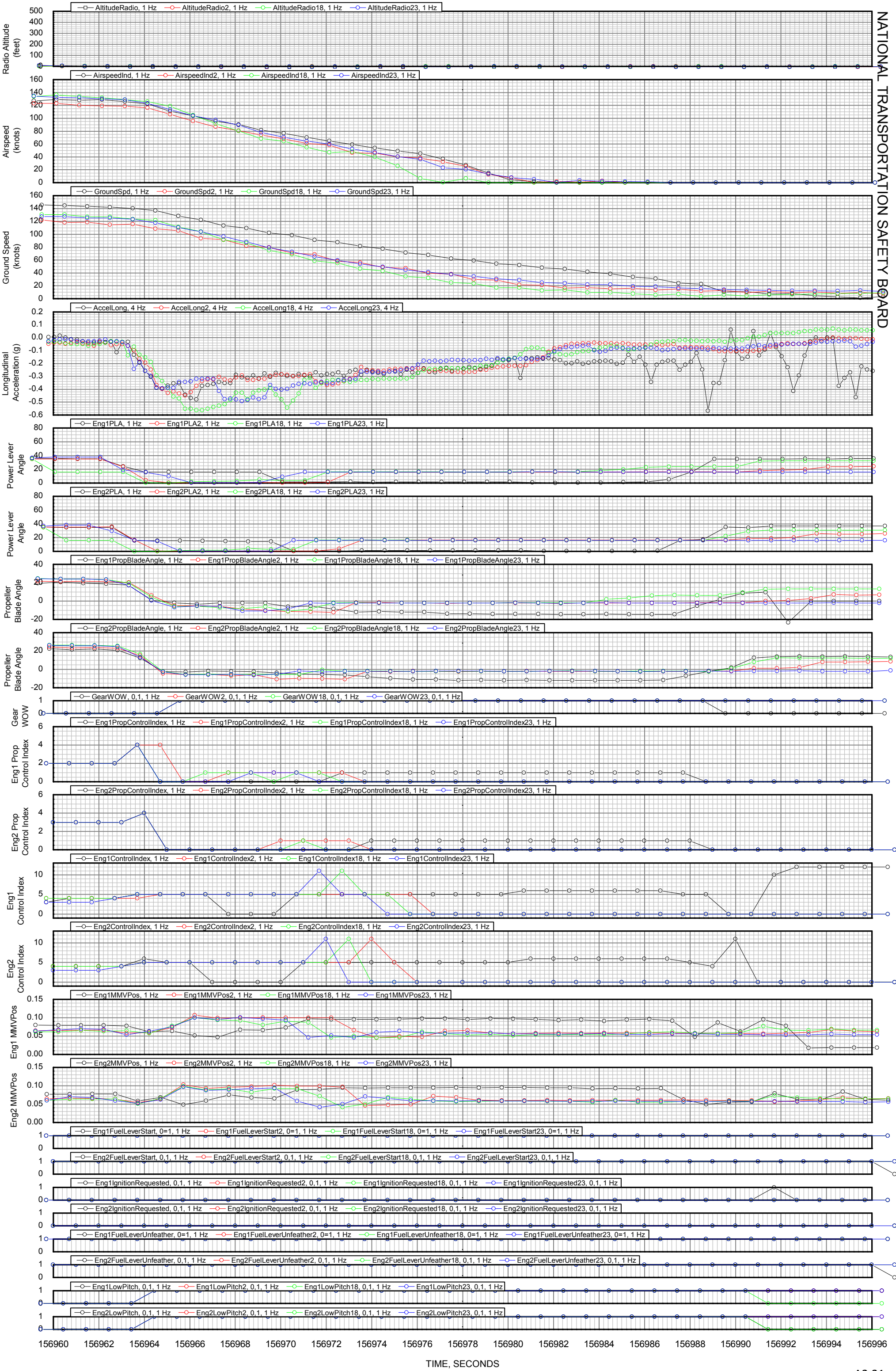
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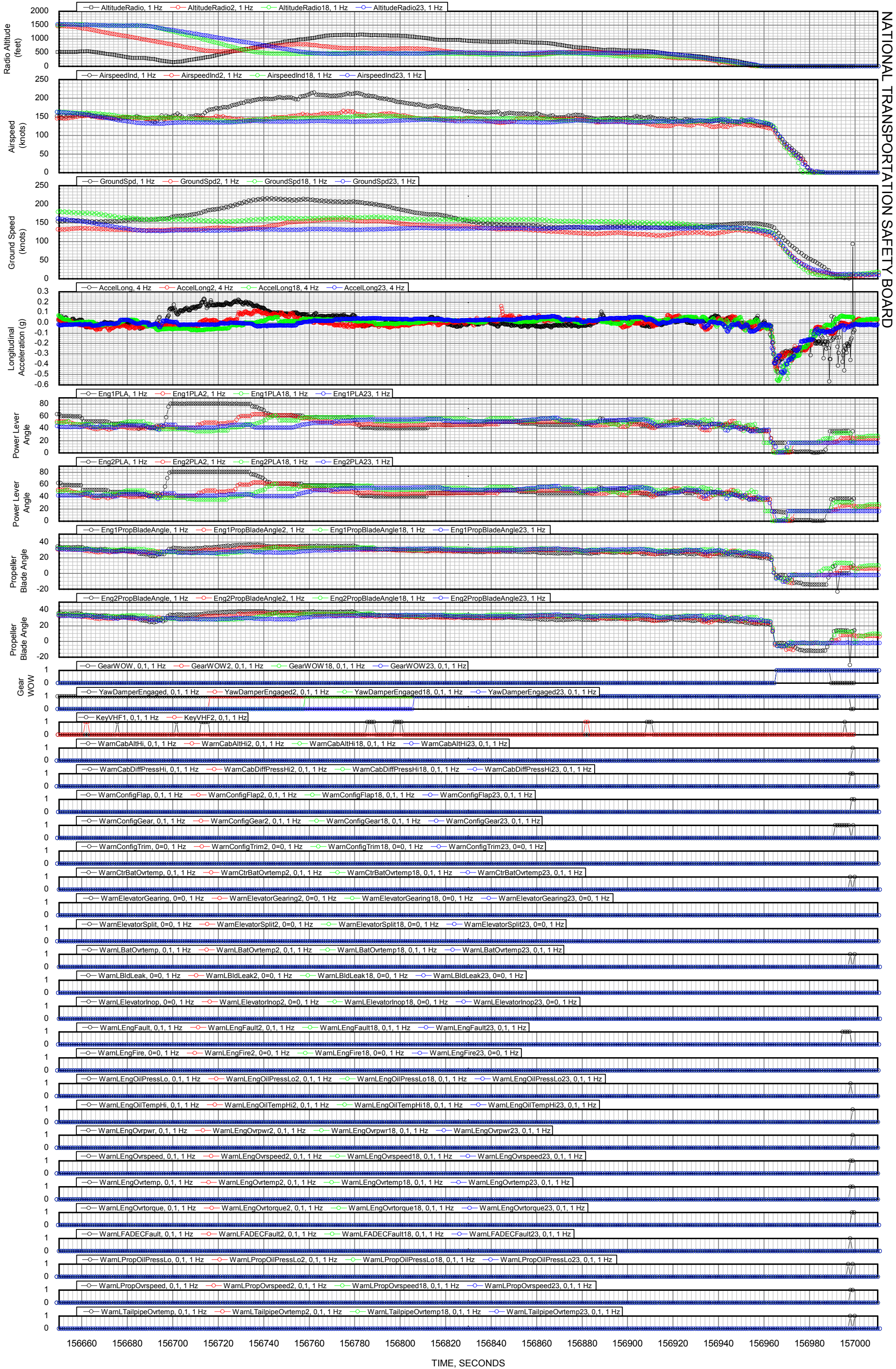


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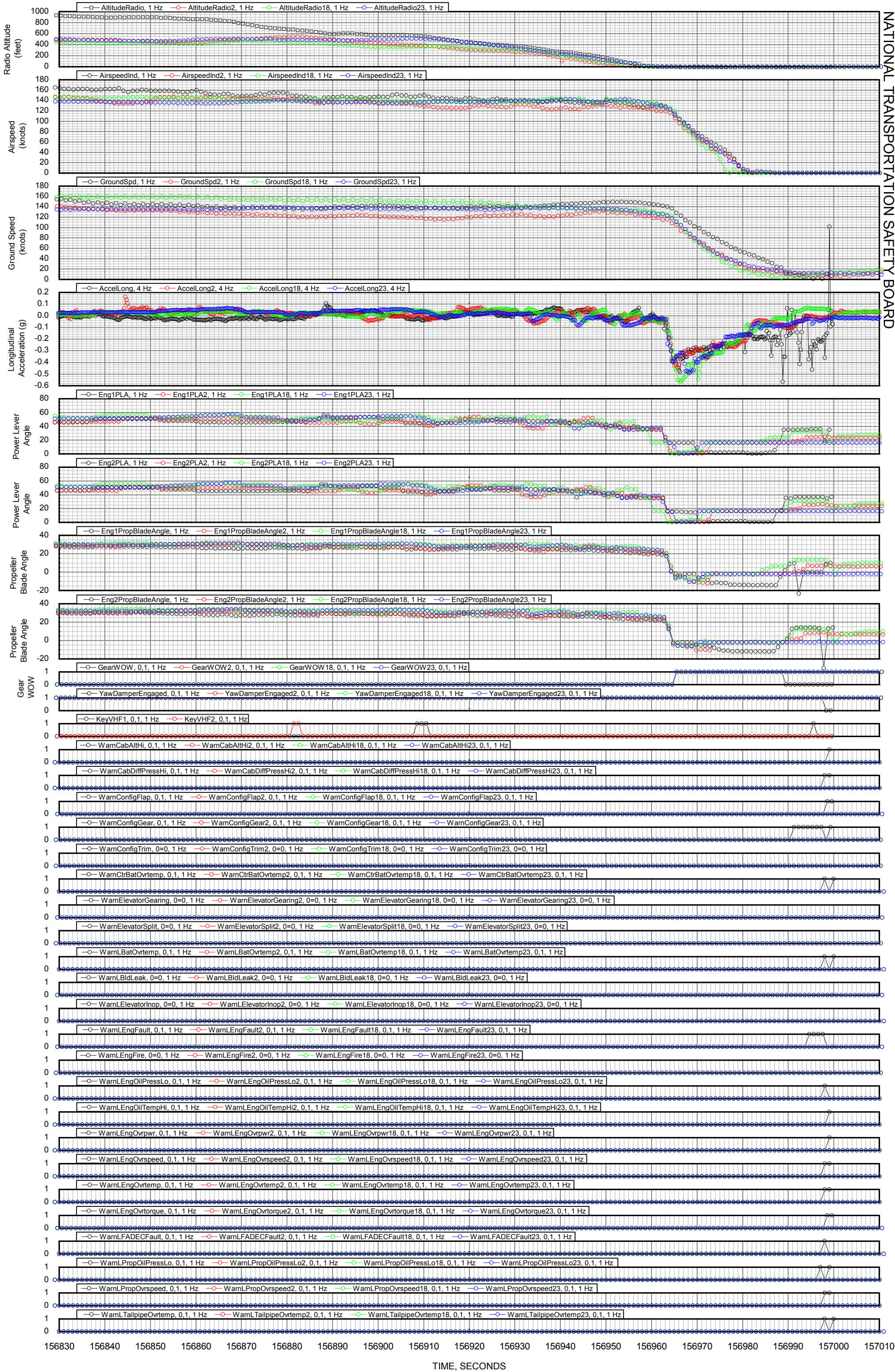
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [ENGINE PARAMETERS]



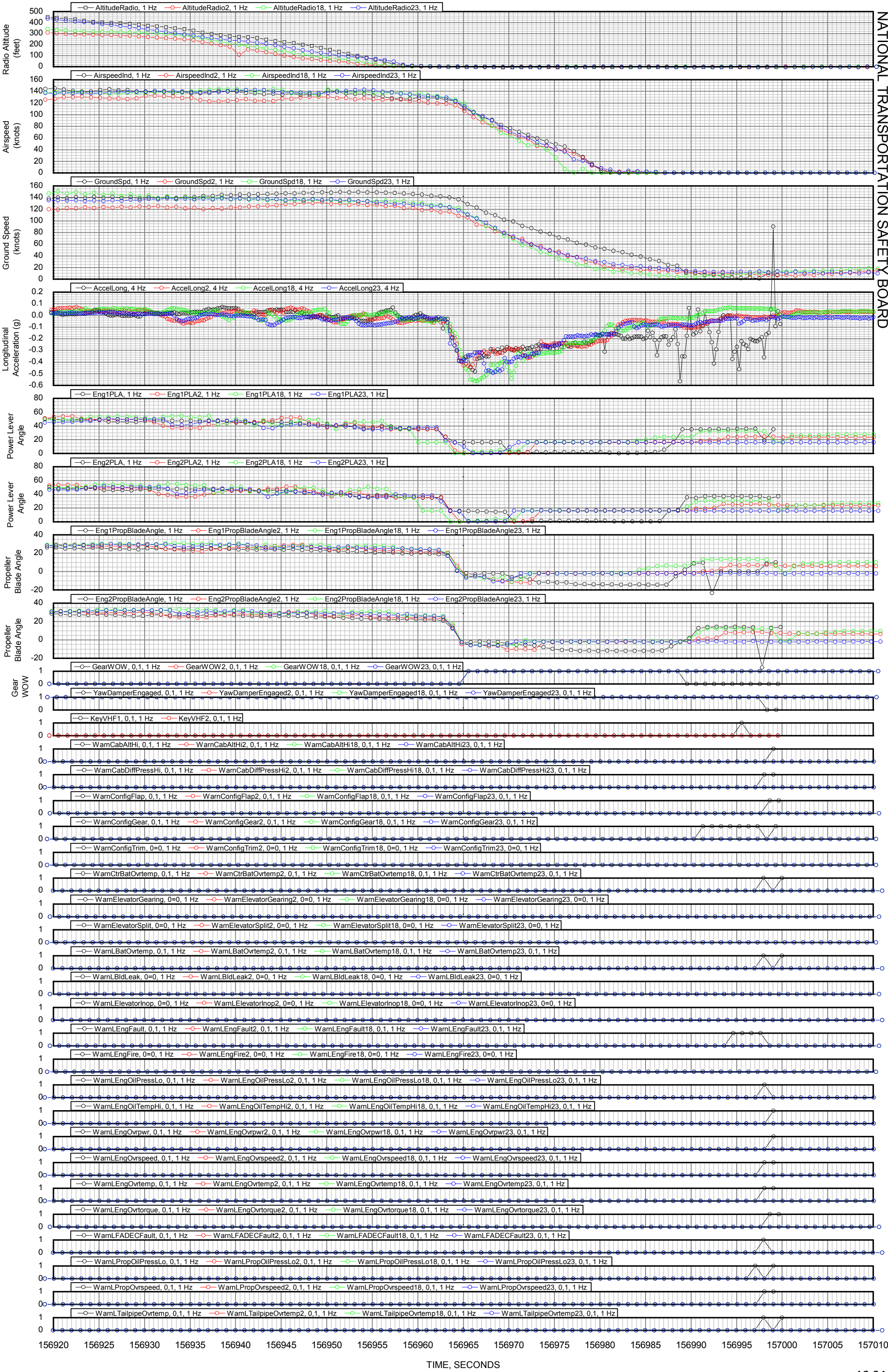
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WARNING PARAMETERS]



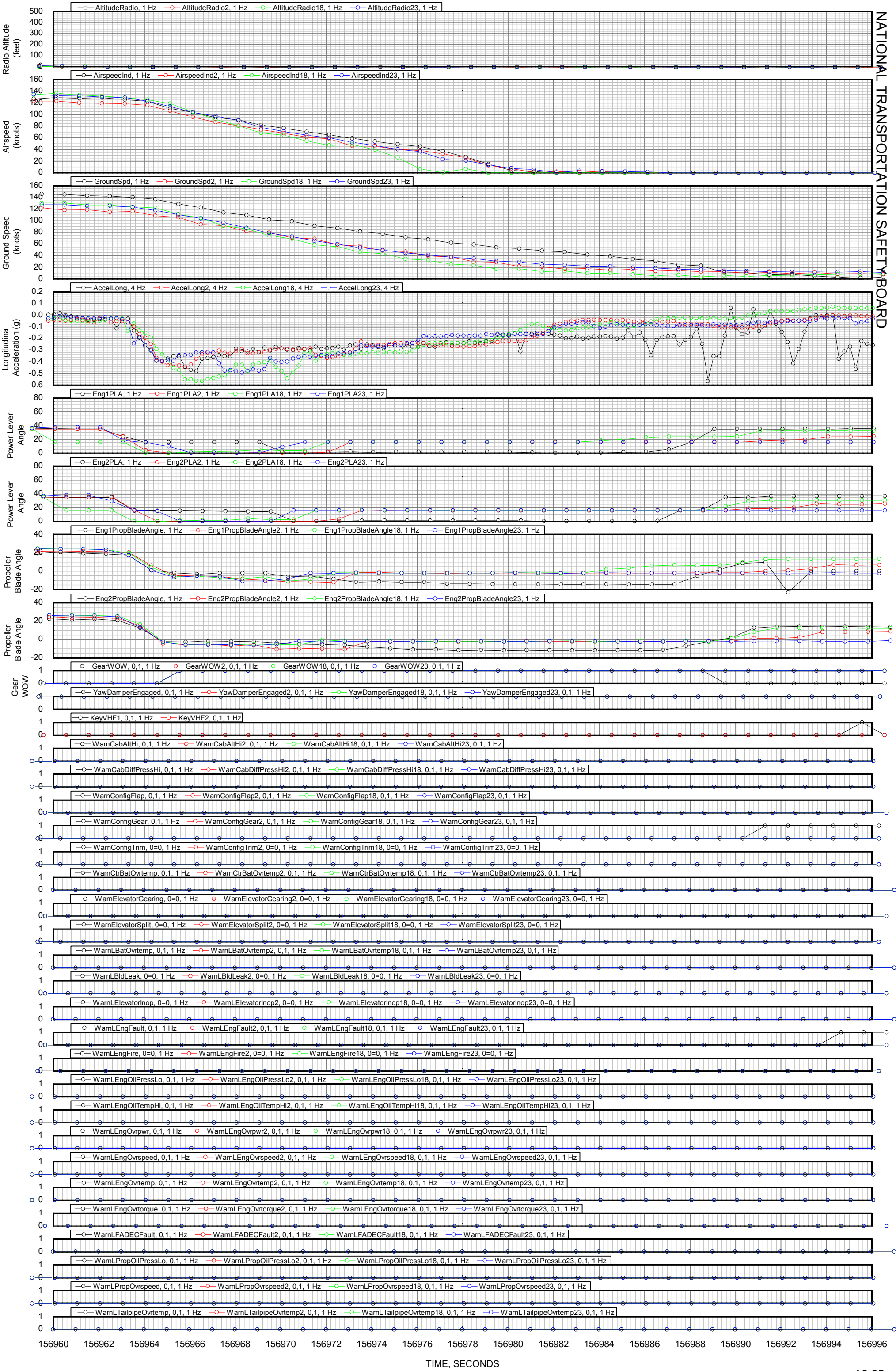
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WARNING PARAMETERS]



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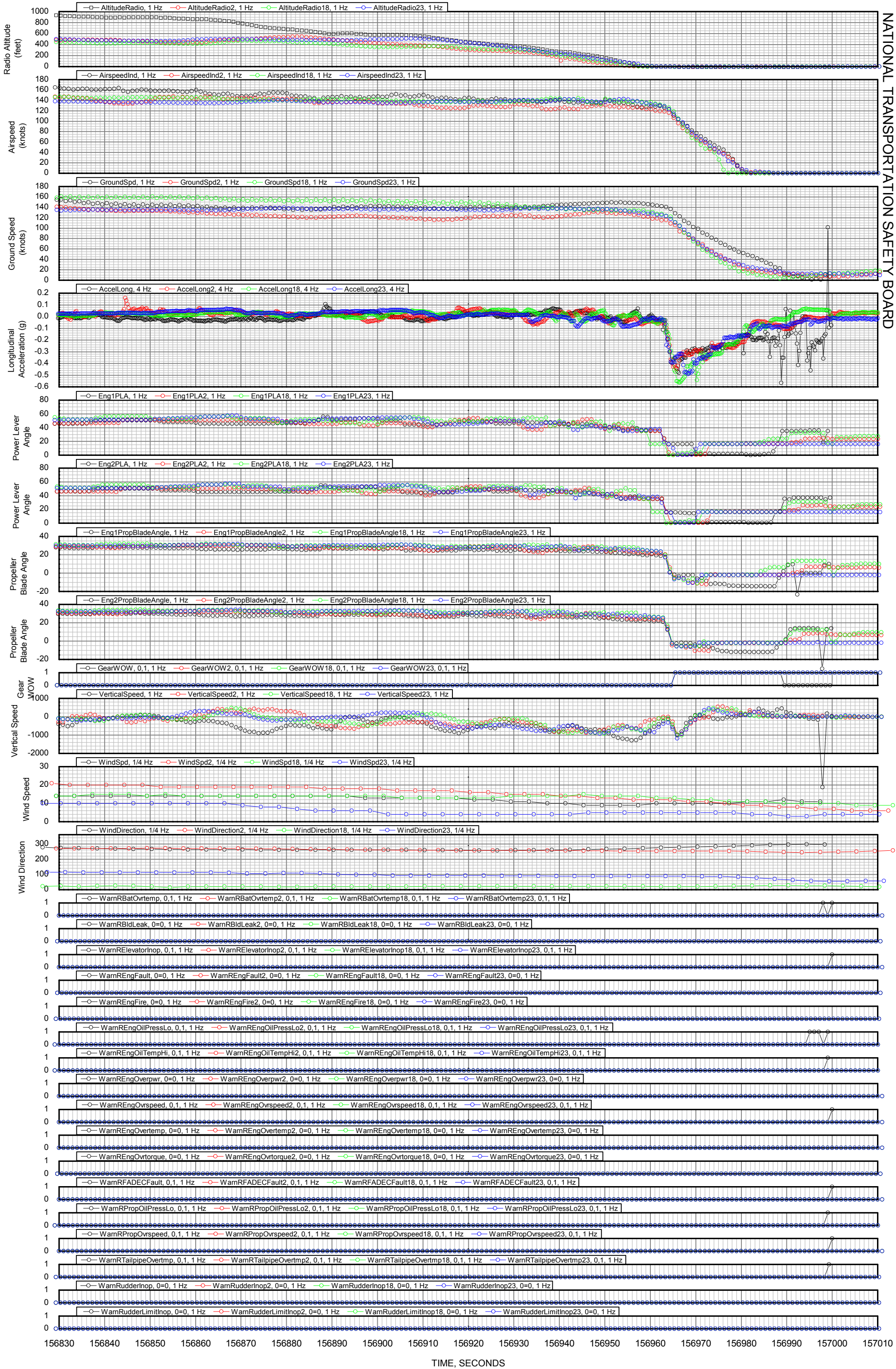
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RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WARNING PARAMETERS]



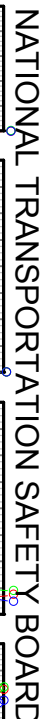
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WIND & WARNING PARAMETERS])



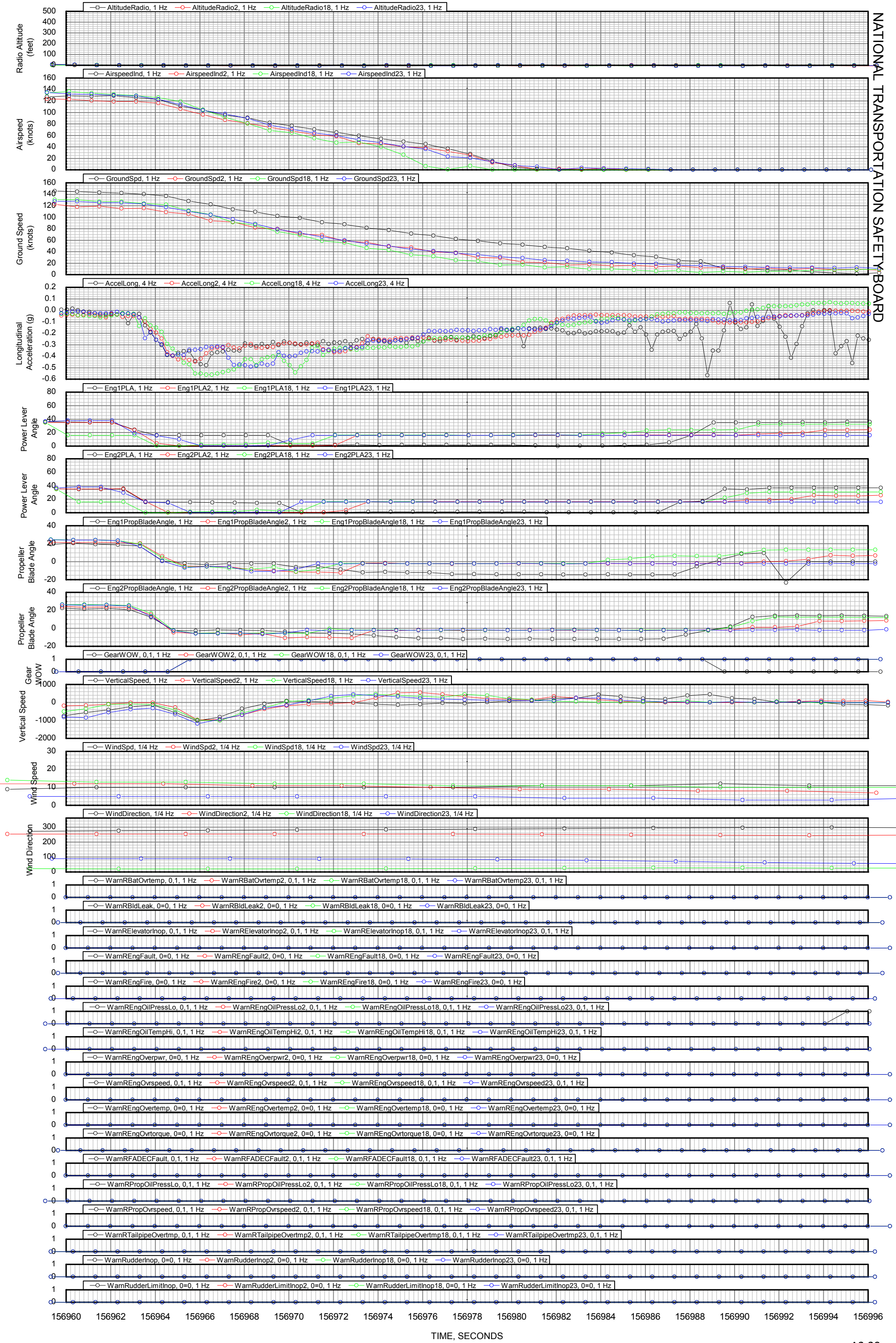
PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WIND & WARNING PARAMETERS]



PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WIND & WARNING PARAMETERS]



PENAIR SAAB 2000 LANDING OVERRUN, THOMAS MADSEN AIRPORT (DUT) [N686PA LANDING COMPARISON]
RUNWAY 13, UNALASKA, ALASKA, OCTOBER 17, 2019 [WIND & WARNING PARAMETERS]



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