

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_1560iS_8ppsm	

Mission Name	S2223061_20220513_F1	Mission Notes
Mission Date	5/13/2022	
Aircraft	N704MD	
Pilot	Tony Kainz	
Co-Pilot		
Operator	James Schoone	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:06:00 AM	
Arrival (Local Time)	2:21:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01115	SW	14:26:12	14:37:02	129.5	Data did not record to CRU drive
Test	S	14:39:29	14:39:54	127.0	Test fire
Test	SE	14:53:44	14:53:55	179.2	Test fire
Test	NE	14:57:48	14:57:56	195.8	Test fire
01115	SW	15:06:14	15:17:12	127.9	
01092	N	15:25:53	15:38:39	132.0	
01093	S	15:42:20	15:56:10	122.1	
01094	N	15:58:45	16:11:48	129.4	
01095	S	16:15:30	16:29:14	122.8	
01096	N	16:31:42	16:44:25	132.6	Refly 12-14 statute miles FSE due to clouds
01097	S	16:47:49	17:01:42	121.4	
01098	N	17:03:45	17:16:23	133.4	
01099	S	17:20:14	17:33:29	127.2	
01100	N	17:36:21	17:49:29	128.4	
01101	S	17:52:44	18:05:47	129.1	
01102	N	18:08:34	18:21:44	128.1	
01103	S	18:25:07	18:38:06	129.7	Light Turb
01104	N	18:40:14	18:53:07	131.1	Light Turb
01105	S	18:56:13	19:09:00	132.1	Light Turb

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Mission Name	S2223061_20220514_F1	Mission Notes
Mission Date	5/14/2022	
Aircraft	N704MD	
Pilot	Tony Kainz	
Co-Pilot		
Operator	James Schoone	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:10:00 AM	
Arrival (Local Time)	1:15:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
test	N	14:29:12	14:29:20	170.2	
01106	S	14:37:04	14:49:54	131.6	
01107	N	14:52:21	15:05:03	132.6	
01108	S	15:07:44	15:20:37	130.8	
01109	N	15:23:10	15:31:15	134.2	
01110	S	15:34:25	15:42:16	130.0	
01111	N	15:45:05	15:52:38	135.1	
01112	S	15:55:24	16:03:13	130.5	
01113	N	16:05:24	16:13:08	132.0	Refly 0-8 statute miles FSE, section fails QL1 density requirements due to turbulence \ Light Turb.
01114	S	16:15:59	16:23:50	129.8	
Cross tie	SW	16:28:34	16:32:57	144.5	
01091	S	16:41:39	16:57:53	130.1	
01056	SW	17:04:12	17:19:51	129.9	
01057	E	17:25:38	17:35:39	137.9	
01058	SW	17:39:29	17:49:23	130.4	
01059	E	17:52:14	18:01:23	136.8	

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_1560iS_8ppsm	

Mission Name	S2223061_20220517_F1	Mission Notes
Mission Date	5/17/2022	
Aircraft	N704MD	
Pilot	Tony Kainz	
Co-Pilot		
Operator	James Schoone	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:34:00 AM	
Arrival (Local Time)	2:46:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01089	SW	14:49:55	15:04:56	132.5	
01088	E	15:08:02	15:23:11	131.9	
01087	SW	15:25:39	15:40:46	132.2	
01086	E	15:43:08	15:58:04	133.7	
01085	SW	16:00:37	16:15:13	134.5	
01084	E	16:17:56	16:31:42	135.9	
01083	SW	16:34:46	16:47:57	134.0	
01082	E	16:50:21	17:03:28	133.4	
01081	SW	17:05:35	17:18:18	134.7	
01080	E	17:20:56	17:32:57	134.9	
01079	SW	17:35:36	17:47:27	130.9	
01078	E	17:49:26	18:01:03	133.1	
01077	SW	18:02:55	18:14:03	135.5	
01076	E	18:15:47	18:26:39	133.6	
01075	SW	18:28:06	18:38:18	135.3	
01074	E	18:39:49	18:49:44	135.9	
01073	SW	18:51:21	19:01:59	131.6	
01072	E	19:04:10	19:14:31	134.4	
01071	SW	19:16:51	19:26:06	132.7	
Cross Tie	N	19:27:33	19:34:09	164.2	

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_1560iIS_8ppsm	

Mission Name	S2223546_20220517_F1	Mission Notes
Mission Date	5/17/2022	Good flight today. We skirted rain and clouds for most of the flight.
Aircraft	N840JA	
Pilot	Kale Young	
Co-Pilot		
Operator	Justen Maxey	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:30:00 AM	
Arrival (Local Time)	3:30:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01055	SW	14:52:49	15:08:51	125.1	
01054	E	15:14:23	15:29:38	129.4	
01053	SW	15:34:22	15:49:36	130.2	
01052	E	15:54:00	16:10:36	126.6	
01051	SW	16:14:17	16:31:03	127.0	
01050	E	16:34:21	16:51:11	126.5	
01049	SW	16:55:01	17:11:42	127.5	
01048	E	17:15:34	17:32:04	128.9	
01047	SW	17:35:55	17:52:27	128.6	
01046	E	17:55:55	18:12:20	129.5	
01045	SW	18:15:40	18:32:11	128.5	
01044	E	18:35:51	18:52:20	128.6	
01043	SW	18:56:23	19:11:36	126.9	
01042	E	19:15:29	19:27:05	129.8	
01041	SW	19:31:10	19:41:56	127.5	
01040	E	19:45:54	19:52:21	127.2	
01039	SW	19:56:30	20:01:04	129.2	
01090	N	20:09:24	20:17:47	126.6	

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_1560iS_8ppsm	

Mission Name	S2223546_20220519_F1	Mission Notes
Mission Date	5/19/2022	N840JA Completed 8ppsm Acquisition and Mobbed to KSBM for camera swap into N208NR
Aircraft	N840JA	
Pilot	Tony Kainz	
Co-Pilot		
Operator	James Schoone	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSBM	
Departure (Local Time)	11:20:00 AM	
Arrival (Local Time)	3:28:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01070	SW	16:35:21	16:44:26	132.4	
01069	E	16:46:40	16:55:27	136.6	
01068	SW	16:57:23	17:06:34	133.6	
01067	E	17:08:17	17:17:07	138.7	
01066	SW	17:19:33	17:28:43	133.7	
Test Fire	N	17:32:10	17:32:42	144.2	
01065	E	17:53:49	18:02:57	134.3	Refly 7-9 statute miles FEE due to dropout. Light Turb
01064	SW	18:05:41	18:14:44	135.4	Light Turb
01063	E	18:17:08	18:26:01	134.3	Light Turb
01062	SW	18:28:42	18:37:18	132.8	Light Turb
01061	E	18:39:35	18:48:12	135.8	Light Turb
01060	SW	18:50:26	18:59:26	133.6	Light Turb
Cross Tie	N	19:01:06	19:04:32	189.3	Light Turb

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Flightplan	39833_MN3DEP_1560iS_8ppsm	

Mission Name	S2223546_20220524_F3	Mission Notes
Mission Date	5/24/2022	Completed 1113, 1096, 1065, 1117, 1116, 30069-30072
Aircraft	N208NR	
Pilot	Tony Kainz	
Co-Pilot		
Operator	James Schoone	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	2:17:00 PM	
Arrival (Local Time)	4:11:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01065	E	12:00:00	12:30:00		
01096	N	12:00:00	12:30:00		
01113	N	12:00:00	12:30:00		

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_780iiS_8ppsm	

Mission Name	SN7277_20220510_F1	Mission Notes Crew of N22TE acquired 12 lines of PO39833 MN 3DEP 8 ppsm Southwest quadrant AOI (Lines 1001-1012) on Tuesday May 10th during a single lift utilizing Riegl VQ 780iiS/SN 7277.
Mission Date	5/10/2022	
Aircraft	N22TE	
Pilot	Peter Ludolph	
Co-Pilot		
Operator	Gary Tao	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	8:58:00 AM	
Arrival (Local Time)	2:25:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01001	SW	14:21:04	14:34:42	139.3	Clear, Westbound, 2 Deg Crab
01002	E	14:38:15	14:54:09	123.4	Clear, Eastbound, Slight Turbulence, 4 Deg Crab
01003	SW	14:57:00	15:11:17	137.5	Clear, Westbound, 3 Deg Crab
01004	E	15:14:35	15:29:00	138.4	Clear, Eastbound, Slight Turbulence, 6 Deg Crab
01005	SW	15:32:29	15:46:24	143.6	Clear, Westbound, 2 Deg Crab
01006	E	15:49:39	16:04:01	139.1	Clear, Eastbound, Slight Turbulence, 5 Deg Crab
01007	SW	16:06:53	16:20:34	146.0	Clear, Westbound, Moderate Turbulence, 3 Deg Crab
01008	E	16:23:59	16:38:53	136.2	Clear, Eastbound, Slight Turbulence, 3 Deg Crab
01009	SW	16:48:11	17:07:55	148.6	Clear, Westbound, Moderate Turbulence, 2 Deg Crab
01010	E	17:11:23	17:33:22	133.4	Clear, Eastbound, Slight Turbulence 2 Deg Crab
01011	SW	17:36:22	17:57:31	138.7	Clear, Westbound, 2 Deg Crab
01012	E	18:01:17	18:28:23	108.1	Clear, Eastbound, Slight Turbulence, Data failed to write to backup SSD in DR1560 2nd Drive Bay Slot partway down line after reaching 90% capacity on 1st Drive? EXT4COPY Recommending SSD Drive be repaired. Copying Data via Windows File Manager. Awaiting QC from Lexington before "Repairing" Drive via 1560DR utility. Entire Line should be Reflown. CrossTie flown afterwards did not appear to write either. Recommending usin Planned X-Tie from 5/7 to process.
XTie	S	18:40:19	18:40:19		CrossTie could not record due to SSD being >90% full
XTie	S	18:40:36	18:40:36		CrossTie could not record due to SSD being >90% full
XTie	S	18:41:38	18:41:38		CrossTie could not record due to SSD being >90% full

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Mission Name	SN7277_20220511_F1	Mission Notes
Mission Date	5/11/2022	Crew of N22TE acquired 1 full and 1 partial 8ppsm LiDAR line of northern/northeast quadrant AOI of 39833 MN 3DEP project in marginal conditions on Wednesday, May 11th utilizing Riegl VQ 780iiS/ SN7277 sensor. Relief crew arriving later in the evening.
Aircraft	N22TE	
Pilot	Peter Ludolph	
Co-Pilot		
Operator	Gary Tao	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:11:00 AM	
Arrival (Local Time)	10:50:00 AM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01131	N	14:43:10	14:54:55	142.9	NorthBound, Slight Haze, Smooth, 6 Deg Crab
01132	S	14:58:39	15:07:53	125.2	Refly 0-11 statute miles FSE due to abort. SouthBound, Slight Haze, Smooth, Broke off 8.5 NM from FSE due to clouds. Partial line.
Xtie	E	15:11:57	15:22:01	122.2	EastBound Xtie @151157 and RTB to STP

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_780iS_8ppsm	

Mission Name	SN7277_20220513_F1	Mission Notes
Mission Date	5/13/2022	One lift....Smooth and clear.
Aircraft	N22TE	
Pilot	Chad Unangst	
Co-Pilot		
Operator	Jonathan Swan	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:24:00 AM	
Arrival (Local Time)	1:55:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
test	SW	14:56:19	14:56:42	136.7	
01053	SW	15:00:14	15:11:51	131.6	
01052	E	15:22:23	15:40:05	147.3	
01051	SW	15:42:51	16:01:33	139.7	
01050	E	16:04:13	16:21:51	148.1	Refly 24-33 statute miles FWE due to clouds
01049	SW	16:24:56	16:44:20	134.7	
01048	E	16:46:42	17:03:33	155.0	
01047	SW	17:06:14	17:26:09	131.4	
01046	E	17:28:52	17:45:33	155.8	
01045	SW	17:48:46	18:08:29	132.1	
01044	E	18:10:20	18:27:22	153.0	
xtie	N	18:30:32	18:33:06	181.4	

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_780iIS_8ppsm	

Mission Name	SN7277_20220514_F1	Mission Notes
Mission Date	5/14/2022	Reflew line 12 completely. Light turbulence today.
Aircraft	N22TE	
Pilot	Chad Unangst	
Co-Pilot		
Operator	Jonathan Swan	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	9:30:00 AM	
Arrival (Local Time)	2:13:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01012	SW	14:54:15	15:15:34	137.3	
01013	E	15:17:58	15:38:13	144.5	
01014	SW	15:41:44	16:02:52	138.6	
01015	E	16:05:01	16:24:53	147.4	
01016	SW	16:28:02	16:48:25	143.4	
01017	E	16:51:00	17:10:24	150.8	
01018	SW	17:13:56	17:35:34	135.1	
01019	E	17:37:42	17:56:41	154.0	
01020	SW	17:59:24	18:21:16	133.6	
01021	E	18:23:23	18:42:45	150.9	
xtie	S	18:46:14	18:50:13	123.1	

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_780iIS_8ppsm	

Mission Name	SN7277_20220515_F2	Mission Notes
Mission Date	5/15/2022	Had issues today with the Pilot Display\ Data Logger and POS communications. Eventually all resolved after landing at Mankato to troubleshoot. Flew until it was too turbulent to continue.
Aircraft	N22TE	
Pilot	Chad Unangst	
Co-Pilot		
Operator	Jonathan Swan	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	11:09:00 AM	
Arrival (Local Time)	2:00:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
test	SW	16:55:39	16:55:51	109.2	
01043	E	17:00:27	17:23:20	142.0	
01042	SW	17:26:22	17:45:02	138.0	
01041	E	17:47:02	18:04:43	145.5	
01040	SW	18:07:23	18:26:18	136.2	
xtie	N	18:29:34	18:31:33	151.7	

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_780iiS_8ppsm	

Mission Name	SN7277_20220516_F1	Mission Notes
Mission Date	5/16/2022	Later launch again today as requested by Tower to avoid their morning rush.
Aircraft	N22TE	Sustained light to moderate turbulence again today as well. No gaps in coverage observed.
Pilot	Chad Unangst	
Co-Pilot		
Operator	Jonathan Swan	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	10:00:00 AM	
Arrival (Local Time)	1:38:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
01039	SW	15:28:26	15:47:27	135.6	
01038	E	15:50:05	16:07:27	148.4	
01037	SW	16:09:54	16:28:46	136.6	
01036	E	16:30:52	16:48:40	144.9	
01035	SW	16:51:11	17:10:02	136.9	
01034	E	17:12:29	17:29:48	149.1	
01033	SW	17:32:10	17:52:04	129.8	
01032	E	17:54:05	18:12:05	143.5	
xtie	N	18:15:44	18:19:16	139.7	unplanned

Project	947122-R039833.00	MN_CentralMissRiver_B22 (Woolpert)
Flightplan	39833_MN3DEP_780iIS_8ppsm	

Mission Name	SN7277_20220523_F1	Mission Notes
Mission Date	5/23/2022	First lift we finished lines 1022-1031 and the 1050 reflight in light to moderate turbulence.
Aircraft	N22TE	
Pilot	Chad Unangst	
Co-Pilot		
Operator	Jonathan Swan	
Co-Operator		
Vendor	NV5 Geospatial	
Base Airport	KSTP	
Departure (Local Time)	10:00:00 AM	
Arrival (Local Time)	2:56:00 PM	

Line	Heading	Start Time (UTC)	Stop Time (UTC)	Speed (kt)	Notes
test	SW	15:24:21	15:24:33	140.1	
01031	SW	15:25:52	15:43:38	145.3	
01030	E	15:46:03	16:03:58	144.3	
01029	SW	16:06:14	16:24:31	141.6	
01028	E	16:28:50	16:49:58	137.8	
01027	SW	16:52:13	17:12:57	140.6	
01026	E	17:15:07	17:35:50	140.7	
01025	SW	17:37:55	17:58:26	142.1	
01024	E	18:00:35	18:21:30	139.5	
01023	SW	18:23:26	18:43:44	143.9	
01022	E	18:45:35	19:06:59	136.5	
xtie	N	19:13:57	19:22:18	144.9	
01050	SW	19:25:44	19:45:07	134.6	