



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

October 27, 2016

Attachment 9 – U.S. Naval Observatory

Sun and Moon Data

OPERATIONAL FACTORS

DCA16IA200

Sun and Moon Data for One Day

U.S. Naval Observatory Astronomical Applications Department

Rapid City, Pennington County, SD (Longitude W103° 14', Latitude N44° 4')

Thursday, July 7, 2016

Mountain Daylight Time

Sun

Begin civil twilight	4:42 a.m.
Sunrise	5:18 a.m.
Sun transit	12:58 p.m.
Sunset	8:38 p.m.
End civil twilight	9:13 p.m.

Moon

Moonrise	8:55 a.m.
Moon transit	3:53 p.m.
Moonset	10:42 p.m.

Closest Primary Moon Phase: New Moon on July 4, 2016 at 5:01 a.m. (local daylight time)

Phase of the Moon on July 7, 2016: Waxing Crescent with 13% of the Moon's visible disk illuminated.



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