

Navigation Problems Question Tables

NP-0001	Zone Time	GHA	Observed Altitude	Declination
	0915	110°44.9'	40°01.9'	S 0°15.8'
	0950	119°27.4'	46°22.9'	S 0°16.3'
	1020	127°00.9'	51°21.7'	S 0°16.8'

NP-0002	Zone Time	GHA	Observed Altitude	Declination
	0700	17°20.1'	21°09.0'	S 00°09.7'
	0900	47°03.0'	46°05.0'	S 00°11.6'
	1100	77°06.4'	63°16.1'	S 00°13.5'

NP-0003	Zone Time	GHA	Observed Altitude	Declination
	0830	21°01.8'	44°16.4'	N 21°29.2'
	0930	36°01.7'	57°25.5'	N 21°28.8'
	1130	66°01.6'	81°30.2'	N 21°28.0'

NP-0004	Zone Time	GHA	Observed Altitude	Declination
	0800	12°50.0'	19°00.0'	S 01°38.8'
	1030	50°20.4'	51°42.0'	S 01°36.5'
	1130	65°20.5'	62°11.5'	S 01°35.5'

NP-0005	Body	Zone Time	GHA	Observed Altitude	Declination
	Fomalhaut	0545	169°18.5'	32°50.8'	S 29°43.4'
	Altair	0550	217°14.7'	48°27.2'	N 8°48.9'
	Spica	0600	316°09.6'	13°34.0'	S 11°03.8'

NP-0006	Body	Zone Time	GHA	Observed Altitude	Declination
	Peacock	0520	226°18.5'	49°42.9'	S 56°47.6'
	Altair	0535	238°38.2'	43°53.1'	N 8°48.9'
	Spica	0550	338°48.5'	21°11.7'	S 11°03.8'

NP-0008	Body	Zone Time	GHA	Observed Altitude	Declination
	Sirius	1836	73°02.7'	46°00.5'	S 16°41.7'
	Regulus	1842	23°46.9'	49°07.2'	N 12°03.5'
	Mirfak	1900	129°24.3'	35°51.6'	N 49°47.7'

NP-0009	Body	Zone Time	GHA	Observed Altitude	Declination
	Rigel	1845	329°19.7'	19°54.7''	S 8°13.4'
	Peacock	1910	107°58.4'	32°43.9''	S 56°47.8'
	Markab	1930	73°04.1'	39°53.1'	N 15°06.5'

NP-0010	Body	Zone Time	GHA	Observed Altitude	Declination
	Regulus	0540	218°35.9'	13°02.2'	N 12°03.5'
	Antares	0552	126°23.5'	38°04.1''	S 26°23.3'
	Vega	0600	96°23.2'	52°33.5'	N 38°45.8'

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NP-0011	Body	Zone Time	GHA	Observed Altitude	Declination
	Venus	1810	341°3.4'	38°48.9''	S 12°48.1'
	Altair	1816	255°00.4'	41°20.3'	N 8°49.3'
	Peacock	1822	247°55.8'	48°39.5'	S 56°47.8'

NP-0012	Body	Zone Time	GHA	Observed Altitude	Declination
	Moon	1030	259°24.4'	34°01.5'	N 9°47.3'
	Sun	1116	202°30.5'	43°00.0'	S 19°38.0'
	Venus	1200	162°57.7'	24°26.9'	S 26°02.4'

NP-0014	Body	Zone Time	GHA	Observed Altitude	Declination
	Venus	1500	73°51.1'	48°29.5'	S 23°22.1'
	Sun L/L	1524	128°25.7'	24°24.9'	S 22°18.6'
	Moon L/L	1548	37°54.1'	43°24.8'	S 9°43.0'

NP-0016	Body	Zone Time	GHA	Observed Altitude	Declination
	Deneb	1905	104°08.0'	19°52.4'	S 26°23.5'
	Antares	1924	172°02.1'	32°22.1'	N 14°40.7'
	Denebola	1945	247°20.6'	38°22.3'	N 45°12.8'

NP-0017	Body	Zone Time	GHA	Observed Altitude	Declination
	Spica	1848	180°24.3'	32°21.4'	S 11°03.8'
	Altair	1910	89°29.8'	43°06.3'	N 8°49.3'
	Kochab	1935	170°33.4'	39°12.0'	N 74°14.3'

NP-0018	Body	Zone Time	GHA	Observed Altitude	Declination
	Achernar	0612	139°47.5'	46°42.8'	S 57°19.8'
	Altair	0620	228°34.3'	34°14.4'	N 8°49.1'
	KausAustralis	0626	251°48.6'	33°25.5'	S 34°23.6'
	Fomalhaut	0630	184°33.8'	87°58.7'	S 29°43.2'

NP-0019	Body	Zone Time	GHA	Observed Altitude	Declination
	Sirius	1836	73°02.7'	46°00.5'	S 16°41.7'
	Regulus	1842	23°46.9'	49°07.2'	N 12°03.5'
	Mirfak	1900	129°24.3'	35°50.5'	N 49°47.7'

NP-0020	Body	Zone Time	GHA	Observed Altitude	Declination
	Mirfak	0450	100°25.9'	35°27.4'	N 49°47.5'
	Fomalhaut	0502	169°59.9'	38°01.3'	S 29°43.1'
	Altair	0514	219°39.9'	31°39.5'	N 8°49.1'

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NP-0021	Body	Zone Time	GHA	Observed Altitude	Declination
	Fomalhaut	0452	272°03.3'	46°05.3'	S 29°43.1'
	Canopus	0459	162°05.5'	41°48.9'	S 52°41.0'
	Achernar	0510	236°28.2'	60°26.5'	S 57°19.6'

NP-0022	Body	Zone Time	GHA	Observed Altitude	Declination
	Capella	1848	195°07.8'	44°10.2'	N 45°58.8'
	Sirius	1903	167°06.2'	46°52.9'	S 16°41.7'
	Aldebaran	1912	201°44.0'	38°17.9'	N 16°28.2'

NP-0023	Body	Zone Time	GHA	Observed Altitude	Declination
	Venus	1129	350°00.1'	43°26.8'	S 25°41.8'
	Moon	1134	082°54.7'	43°15.0'	S 01°46.5'
	Sun	1137	042°38.0'	81°44.7'	S 20°11.7'

NP-0024	Body	Zone Time	GHA	Observed Altitude	Declination
	Vega	1810	299°26.6'	23°08.7'	N 38°46.3'
	Fomalhaut	1823	237°37.0'	50°23.9'	S 29°43.2'
	Antares	1835	337°43.4'	40°53.1'	S 26°23.4'

NP-0025	Body	Zone Time	GHA	Observed Altitude	Declination
	Mirfak	0430	110°23.1'	47°20.8'	N 49°47.7'
	Regulus	0440	011°48.3'	37°49.9'	N 12°03.5'
	Sirius	0455	066°19.5'	48°25.3'	S 16°41.3'

NP-0026	Body	Zone Time	GHA	Observed Altitude	Declination
	Rigel	0558	238°11.2'	38°39.5'	S 08°13.2'
	Capella	0600	238°16.1'	55°15.1'	N 45°58.7'
	Denebola	0604	141°05.0'	33°39.8'	N 14°40.6'

NP-0027	Body	Zone Time	GHA	Observed Altitude	Declination
	Canopus	0510	120°08.7'	51°31.4'	S 52°40.9'
	Aldebaran	0512	147°49.1'	29°07.8'	N 16°28.4'
	Regulus	0514	065°11.7'	45°57.5'	N 12°03.5'

NP-0028	Body	Zone Time	GHA	Observed Altitude	Declination
	Regulus	0530	018°56.5'	22°45.2'	N 12°03.6'
	Sirius	0532	070°12.2'	44°30.6'	S 16°41.3'
	Hamal	0536	140°44.1'	43°16.5'	N 23°22.5'

NP-0029	Body	Zone Time	GHA	Observed Altitude	Declination
	Fomalhaut	0530	203°08.6'	25°17.5'	S 29°43.4'
	Rigil Kent.	0536	194°12.4'	35°26.6'	S 60°45.3'
	Vega	0540	135°43.2'	23°06.8'	N 38°45.7'

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NP-0031	Body	Zone Time	GHA	Observed Altitude	Declination
	Arcturus	0532	137°03.2'	22°34.9'	N 19°16.7'
	Suhail	0537	215°10.4'	26°45.6'	S 43°21.2'
	Capella	0538	273°25.1'	31°43.5'	N 45°58.7'

NP-0032	Body	Zone Time	GHA	Observed Altitude	Declination
	Rigel	0512	167°31.4'	51°37.7'	S 8°13.2'
	Diphda	0518	236°46.1'	31°52.1'	S 18°05.2'
	Acamar	0524	204°33.0'	27°40.9'	S 40°22.5'

NP-0033	Body	Zone Time	GHA	Observed Altitude	Declination
	Regulus	0530	198°24.3'	77°21.3'	N 12°03.4'
	Arcturus	0532	137°03.2'	22°47.9'	N 19°16.7'
	Suhail	0537	215°10.4'	26°44.9'	S 43°21.2'

NP-0034	Body	Zone Time	GHA	Observed Altitude	Declination
	Diphda	0524	076°20.5'	50°34.8'	S 18°05.4'
	Antares	0530	201°26.0'	14°16.9'	S 26°23.4'
	Deneb	0538	140°18.4'	22°00.3'	N 45°12.6'

NP-0036	Body	Zone Time	GHA	Observed Altitude	Declination
	Fomalhaut	0523	133°27.1'	35°40.4'	S 29°43.4'
	Peacock	0527	172°33.9'	48°28.6'	S 56°47.6'
	Antares	0531	232°32.3'	51°43.9'	S 26°23.4'

NP-0038	Body	Zone Time	GHA	Observed Altitude	Declination
	Avoir	1727	209°18.2'	47°24.4'	S 59°27.3'
	Regulus	1732	184°14.7'	46°35.2'	N 12°03.6'
	Betelgeuse	1738	249°03.6'	49°41.5'	N 7°24.1'

NP-0039	Body	Zone Time	GHA	Observed Altitude	Declination
	Mars	0525	180°59.9'	60°05.5'	N 07°05.2'
	Arcturus	0532	137°03.2'	22°39.0'	N 19°16.7'
	Suhail	0537	215°10.4'	26°51.3'	S 43°21.2'