COPTIC CALENDAR

Early Egyptian Christians, like those elsewhere, took systems of reckoning time used in the world that they knew, modified them, and adapted them to their own observances and practices. The civil day of [Christians in Egypt](#) began in the morning, as did that of the ancient Egyptians and the Romans; but their [liturgical](#) day began, then as now, at sunset, like the Jewish, Muslim, and Greek days. The seven-day week was taken over from the Jews, with its first day made the Lord's Day.

The Coptic year is the Alexandrian year, which became the civil year in Egypt in 30 or 26 B.C., shortly after the Roman conquest of Egypt. The evidence for the date of its actual introduction is ambiguous, but in any case, year 1 of the Alexandrian Era, or Era of Augustus, is reckoned as 30/29 B.C. The Alexandrian year is the ancient Egyptian solar year, coordinated with the year in the Romans' Julian calendar, which is itself the Egyptian solar year, but with a different date for the beginning of a new year and a different division of the days into twelve months.

The Alexandrian year retains the ancient Egyptian division of the year into twelve months of thirty days each, plus five more days, called *epagomenai*, at its end, as well as the extra day whose intercalation at the end of every fourth year as a sixth epagomenal day was ordered by Ptolemy III Euergetes in 238 B.C., in order to rectify the old discrepancy between the calendar year of 365 days and the natural solar year.

The Alexandrian year's coordination with that of the Julian calendar, after an initial period of difficulty caused by inaccurate observance of the frequency of leap years (*anni bissextiles*) by the Romans, was rectified, so that from A.D. 5 on, the Alexandrian new year begins on the Julian 29 August, unless it is a year in which the Julian calendar will intercalate a 29 February. In that case, the Alexandrian year begins on the Julian 30 August, because in the Alexandrian system the extra day is intercalated at the very end of the Alexandrian year preceding the one in which the

Julian calendar's 29 February will occur.

The Alexandrian intercalary day thus falls on the Julian 29 August, with the new Alexandrian year then beginning on 30 August and that year's corresponding days in the Julian calendar continuing to be the normal ones plus 1 until the Julian year's own intercalation is made on 29 February, after which the corresponding days are those of ordinary years.

Since the fourth century the era regularly used by the Copts for reckoning the sequence of Alexandrian years has been the Era of Diocletian, in which the year of Diocletian's military election as emperor in November 284 is taken as the starting point. Among Christians, the Era of Diocletian is usually called the ERA OF THE MARTYRS, and in Western texts the abbreviation A.M. (for *anno martyrum*) conventionally indicates that a given year is so reckoned. Thus, the year A.M. 1 is the Alexandrian year running from the Julian 29 August 284 to 28 August 285.

The years A.M. divisible by 4 begin on the Julian 30 (instead of 29) August, as explained above. In the colophons of manuscripts and occasionally elsewhere, the succession of Alexandrian years may also be given according to the Era of the Incarnation, or "of Christ," which is seven years (through 31 December) or eight years (from 1 January) behind the Dionysian Era of the Incarnation, or according to the Era of the World of Ammianus, with the birth of Christ placed in the year of the world 5500.

If a year given according to either of these two eras is divisible by 4, it, too, like a year A.M. divisible by 4, begins on the Julian 30 (instead of 29) August. Through Coptic influence, the Alexandrian year is also used in Ethiopia, where the eras used historically by the Copts have also been followed. The Ethiopian Era ("of mercy"), regularly used in both civil and ecclesiastical calendars in modern times, is identical with the Coptic Era of the Incarnation and is thus seven to eight years behind the era used

universally in Western calendars.

Although the exigencies of modern life have led to extensive use of the Gregorian calendar and of the Islamic calendar with years reckoned from the Hegira, the Coptic church also continues to observe Alexandrian years beginning on the Julian 29 August in an ordinary year, and to reckon the succession of years according to the Era of Diocletian or "of the Martyrs."

For the twelve months of thirty days, the ancient Egyptian names introduced in the first half of the first millennium B.C. are retained, in forms that are copticized or arabized. In the Bohairic dialect, the epagomenal period added at the end of the year is called "the little month." In Arabic the same period is called *al-Nasi'*, "the extension (of time)" or "postponement."

The coordination of the twelve Egyptian months of thirty days each and the five or six epagomenal days with the months and days of the Julian calendar appears in the accompanying table. The nature of the Gregorian reform of the Julian calendar makes it impossible to give Gregorian equivalences that are valid for more than a century or two. Once the Julian date is known, the corresponding Gregorian date can easily be computed according to Rule 2 below. There is no need for such conversion if the Julian date is earlier than the introduction of the Gregorian calendar on 5/15 October 1582.

Comparison of Coptic and Julian Calendars

	Coptic (Alexandrian) Days and Months				Julian Days and Months
	Sahidic (forms vary)	**Bohairic** (forms vary)	**Arabic**	**Ethiopic**	
1-30	ⲑⲟⲟⲩⲧ (Thoout)	ⲑⲟⲟⲩⲧ (Thoout)	Tut	Maskaram	29 (30)* August-27 (28)* September
1-30	ⲡⲁⲟⲡⲉ (Paope)	ⲡⲁⲟⲡⲓ (Paopi)	Babah	Teqemt	28 (29)* September-27 (28)* October
1-30	ⲅⲁⲑⲱⲣ (Hathor)	ⲁⲑⲱⲣ (Athor)	Hatur	Khedar	28 (29)* October-26 (27)* November
1-30	ⲕⲟⲓⲁⲅⲕ (Koiahk)	ⲭⲟⲓⲁⲕ (Choiak)	Kiyahk	Takhsas	27 (28)* November-26 (27)* December
1-30	ⲧⲱⲃⲉ (Tobe)	ⲧⲱⲃⲓ (Tobi)	Tubah	Ter	27 (28)* December-25 (26)* January
1-30	ⲙ̄ϣⲓⲣ (Mshir)	ⲙⲉⲭⲓⲣ (Mechir)	Amshir	Yakatit	26 (27)* January-24 (25)* February
1-4 5-30	Ⲡⲁⲣⲙ̄ϩⲟⲧⲡ̄ (Paremhotep)	Ⲫⲁⲙⲉⲛⲱⲑ (Phamenoth)	Baramhat	Magabit	25-28 (26-29)* February 1-26 March
1-30	Ⲡⲁⲣⲙⲟⲩⲧⲉ (Parmoute)	Ⲫⲁⲣⲙⲟⲩⲑⲓ (Pharmouthi)	Baramudah	Miyazya	27 March-25 April
1-30	ⲡⲁϣⲟⲛⲥ (Pashons)	ⲡⲁⲭⲱⲛ (Pachon)	Bashans	Genbot	26 April-25 May
1-30	ⲡⲁⲱⲛⲉ (Paone)	ⲡⲁⲱⲛⲓ (Paoni)	Ba'unah	Sane	26 May-24 June
1-30	ⲉⲡⲏⲡ (Epep)	ⲉⲡⲏⲡ (Epep)	Abib	Hamle	25 June-24 July
1-30	ⲙⲉⲥⲟⲣⲏ (Mesore)	ⲙⲉⲥⲱⲣⲏ (Mesore)	Misra	Nahase	25 July-23 August
1-5	(No name for the period; a day within it is [Greek]	ⲡⲓⲕⲟⲩϫⲓ ⲛ̄ⲁⲃⲟⲧ (Pikougi enabot)	al-Nasi	Paguemen	24-28 August
6†	ⲉⲡⲁⲅⲟⲙⲉⲛⲏ (Epagomene)				29 August

Comparison of Coptic and Julian Calendars

* Dates in parentheses are those when a year A.M. is divisible by 4, that is, in the Alexandrian months preceding a Julian intercalation of 29 February.

† Epagomenal day 6 (Julian 29 August) is intercalated only at the end of a Copto-Alexandrian year preceding a year A.M. divisible by 4, that is, on the Julian 29 August preceding a Julian intercalation of 29 February.

To convert a Coptic or Ethiopian date (day and month) to its Julian equivalent in an ordinary year (a year A.M. or Ethiopian year not divisible by 4), add the numeral of the Coptic or Ethiopian day of the month to the day before the first day of the Julian period that corresponds to the Coptic or Ethiopian month in question (which can be found in the accompanying table). For instance, to find the Julian date corresponding to the Coptic 15 Kiyahk in an ordinary year, add 15 (the numeral of the day of Kiyahk) to

26 November (the day before the beginning of the Julian period corresponding to the month of Kiyahk in an ordinary year). Thus, 15 plus 26 November becomes 41 November, that is, 11 December.

If the year A.M. or year of the Ethiopian Era is divisible by 4, add 1 to the corresponding Julian date of an ordinary year, if the Coptic or Ethiopian date is one from 1 Tut through 4 Baramhat (from Ethiopian 1 Maskaram through 4 Magabit). Thus, 15 Kiyahk in a year A.M. divisible by 4 equals 11 December plus 1, or 12 December.

To convert a Julian date to its Gregorian equivalent, add to the Julian date 10 days from (Julian) 5 October 1582 through 28 February 1700, 11 days from 29 February 1700 through 28 February 1800, 12 days from 29 February 1800 through 28 February 1900, 13 days from 29 February 1900 through 28 February 2000, and so on, remembering that in the century years not divisible by 400, the Gregorian calendar has no 29 February, while the Julian calendar has it intercalated in those years just as in any other leap year.

To convert a year A.M. to the corresponding year(s) A.D., add 283 to the year A.M. from 1 Tut through 31 December; add 284 to the year A.M. from 1 January to the end of the Coptic year. Thus, A.M. 1700 equals A.D. 1983/1984.

To convert a year of the Ethiopian Era (or old Coptic Era of the Incarnation) to the corresponding year(s) A.D., add 7 to the Ethiopian year or Coptic year "of Christ" from 1 Maskaram (Coptic 1 Tut) through 31 December; add 8 to the same Ethiopian or Coptic year from 1 January through the last Alexandrian epagomenal day. Thus, Ethiopian 1 Ter 1980 (a year divisible by 4) equals Julian 28 December 1987, whose corresponding Gregorian date, lying in the new year, is 10 January 1988.

To convert a year of the Alexandrian Era of the World (of Ammianus, rendered coextensive with the Alexandrian year beginning 29 August) to

the corresponding year(s) A.D., subtract 5493 from the Year of the World from 1 Maskaram (Coptic 1 Tut) through 31 December; subtract 5492 from the year of the world from 1 January through the last Alexandrian epagomenal day. Thus, 1 Genbot (Coptic Bashans) of the Year of the World 7155 (a date after Julian 1 January) equals Julian 26 April 1663. To convert a date in the Alexandrian Era of the World into one of the Ethiopian Era (equals Coptic Era of the Incarnation), subtract 5500 from the Year of the World. Thus, 1 Genbot 7155 equals 1 Genbot 1655 of the Ethiopian Era "of Grace."

[*See also:* Calendar, Gregorian; Calendar, Julian.]

BIBLIOGRAPHY

- Bagnall, R. S., and K. A. Worp. *The Chronological Systems of Byzantine Egypt.* Studia Amstelodamensia ad Epigraphicam, Ius Antiquum et Papyrologicam Pertinentia 8. Zutphen, Netherlands, 1978.
- Boker, R. "Zeitrechnung: Ägypten." In *Realencyclopädie der classischen Altertumswissenschaft,* ser. 2, Vol. 9A/2, pp. 2338- 2454. Stuttgart, 1967.
- Boulos, N. "Proposed Adjustment of the Egyptian-Coptic and Ethiopian Calendars." *Bulletin de la Société d'archéologie copte* 20 (1969-1970):219-38.
- Chaine, M. *La Chronologie des temps chrétiens de l'Egypte et de l'Ethiopie.* Paris, 1925.
- Grumel, V. *La Chronologie,* pp. 166-68, 304. Traité d'Etudes Byzantines 1. Paris, 1958.
- Pestman, P. W. *Chronologie égyptienne d'après les textes démotiques 332 av. J.-C.-453 apr. J.-C.* Papyrologica Lugduno- Batava 15. Leiden, 1967.
- Tables of correspondence for each day of the year, valid for the Gregorian calendar from March 1900 to February 2100, are in P. Peeters, *Bibliotheca hagiographica orientalis*, Subsidia

Hagiographica 10 (Brussels, 1910), pp. xx-xxiii, and (for Ethiopia) in E. Hammerschmidt, *Äthiopische Kalendertafeln* (Wiesbaden, 1977).

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