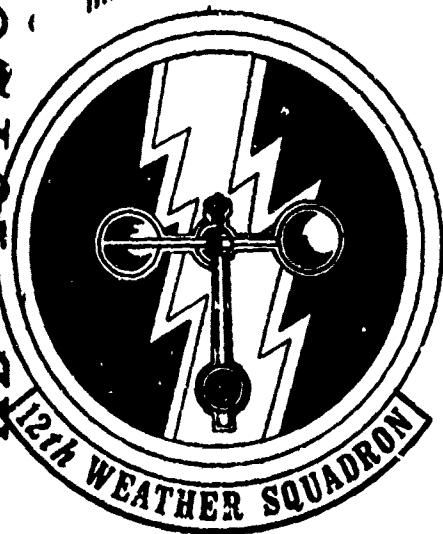


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Technical Paper 72-2

CLOUD AMOUNT ATLAS

NORTH AMERICA and WESTERN NORTH ATLANTIC

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4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Atlas of frequency of sky cover in 5000 foot increments, surface to 35,000 feet.			
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13. ABSTRACT Gives frequency of six-tenths or greater sky cover, by months for 5000 foot increments from surface to 35,000 feet (MSL). Two charts are given for each level; one (K=0) represents stable meteorological conditions, the other (K=.5) represents unstable conditions with strong vertical mixing.			

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KEY WORDS

Cloud amounts
Sky cover

LINK A

LINK B

LINK C

ROLE

WT

ROLE

WT

ROLE

WT

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CLOUD AMOUNT ATLAS
NORTH AMERICA AND WESTERN NORTH ATLANTIC

by

Major Patricia Hayes

31 August 1972

12th Weather Squadron, 3rd Weather Wing
Air Weather Service (MAC) USAF

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PREFACE

The charts in this publication indicate the percent of time that cloud amounts of six-tenth or greater are expected to occur somewhere in the 5000 foot layers indicated.

Two sets of charts are presented, $K=0$ and $K=.5$, which indicate the climatology of clouds in an area. The value $K=0$ represents stable conditions, stratiform clouds with little vertical development. Swelling cumulus with considerable vertical mixing is characteristic of $K=.5$. The choice of chart should be based on a consideration of probable meteorological conditions.

Data sources were the Revised Uniform Summaries of Surface Weather Observations, Part D, prepared by Data Processing Division, USAF Environmental Technical Applications Center, Air Weather Service, MAC. Summaries for approximately 275 locations in North America and Greenland were used. Periods of record were generally 10 to 20 years ending in the late 60's.

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

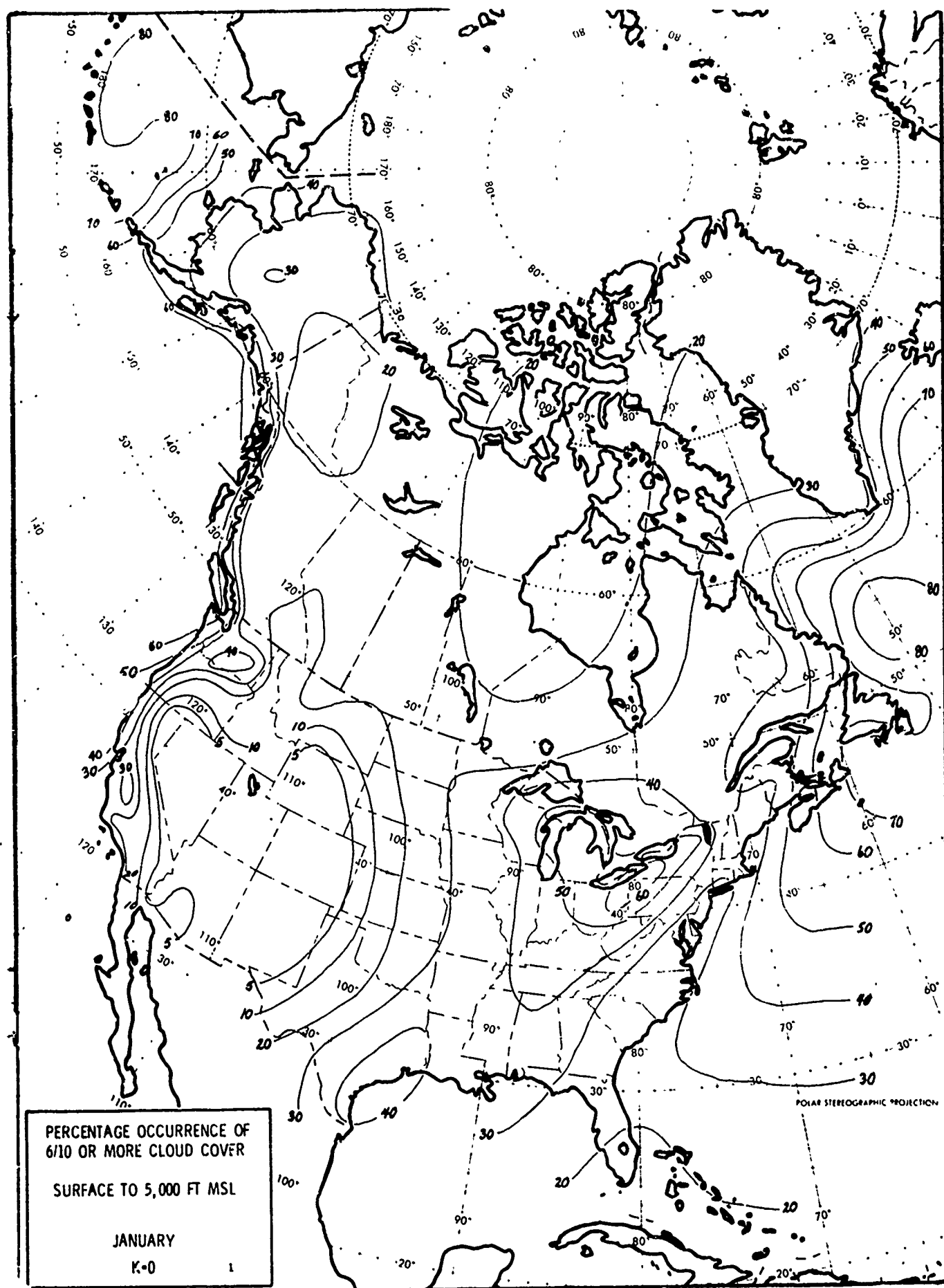
SURFACE TO 5,000 FT MSL

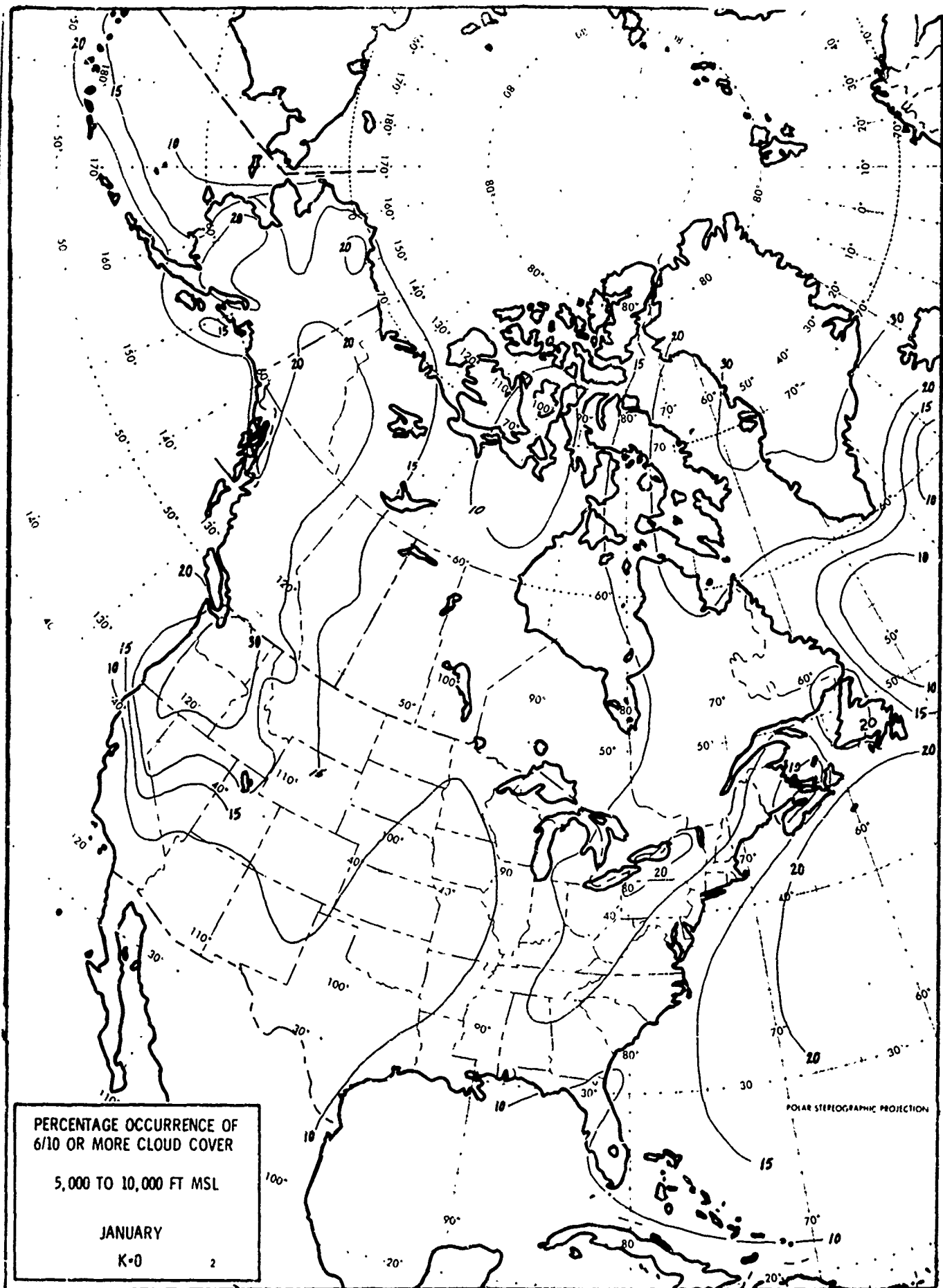
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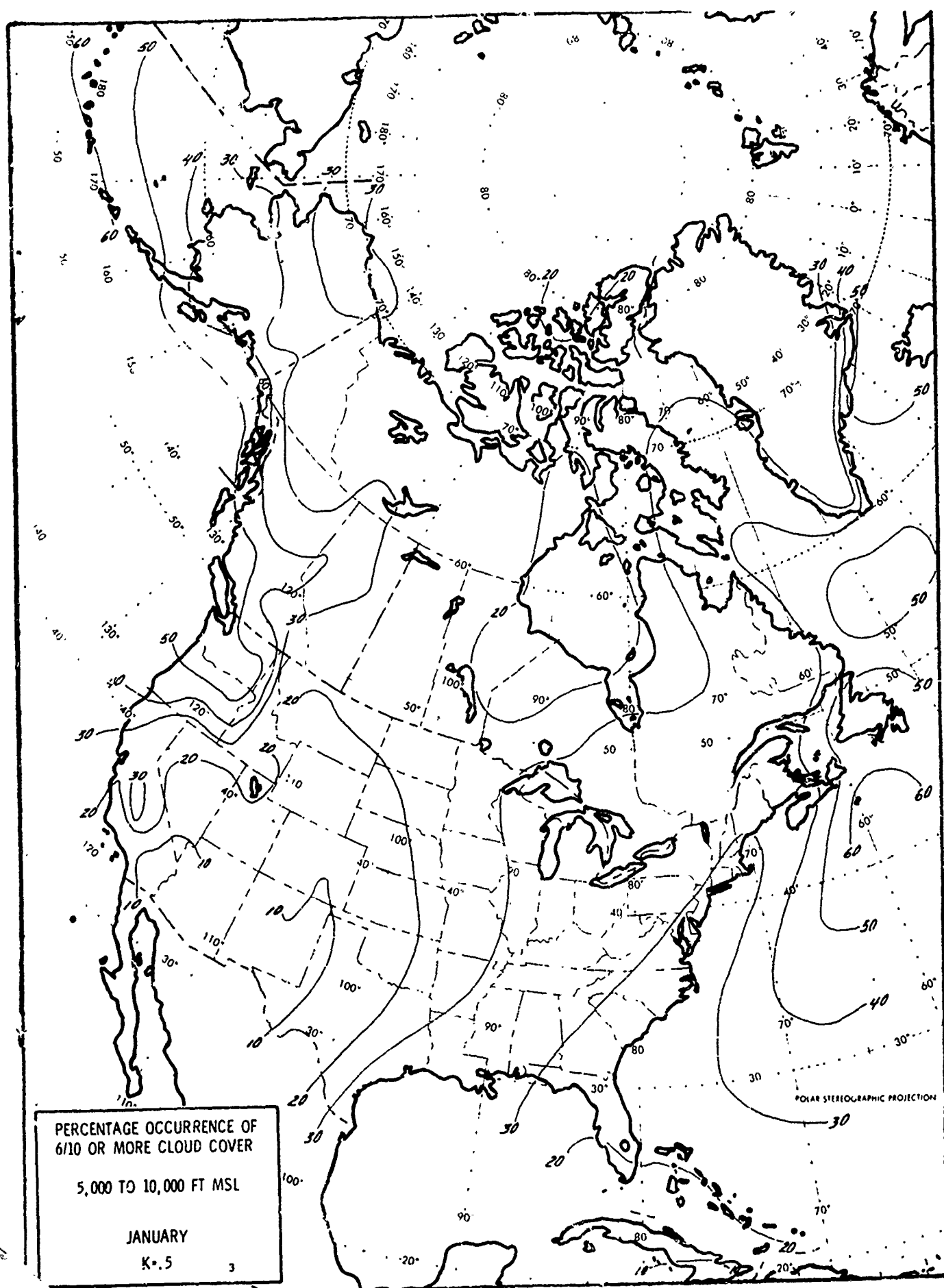
K-0

1

POLAR STEREOGRAPHIC PROJECTION







PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

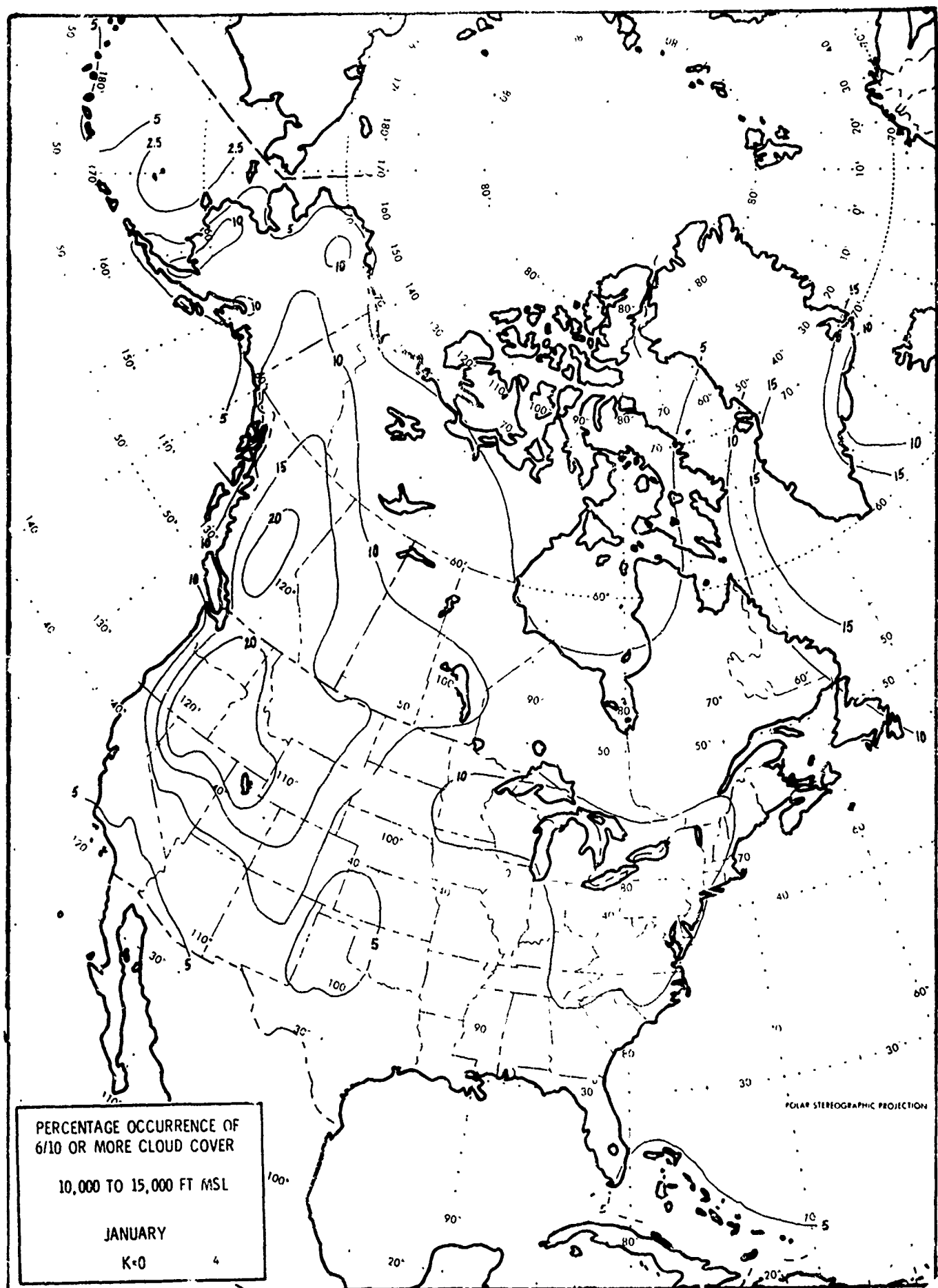
5,000 TO 10,000 FT MSL

JANUARY

K=5

3

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
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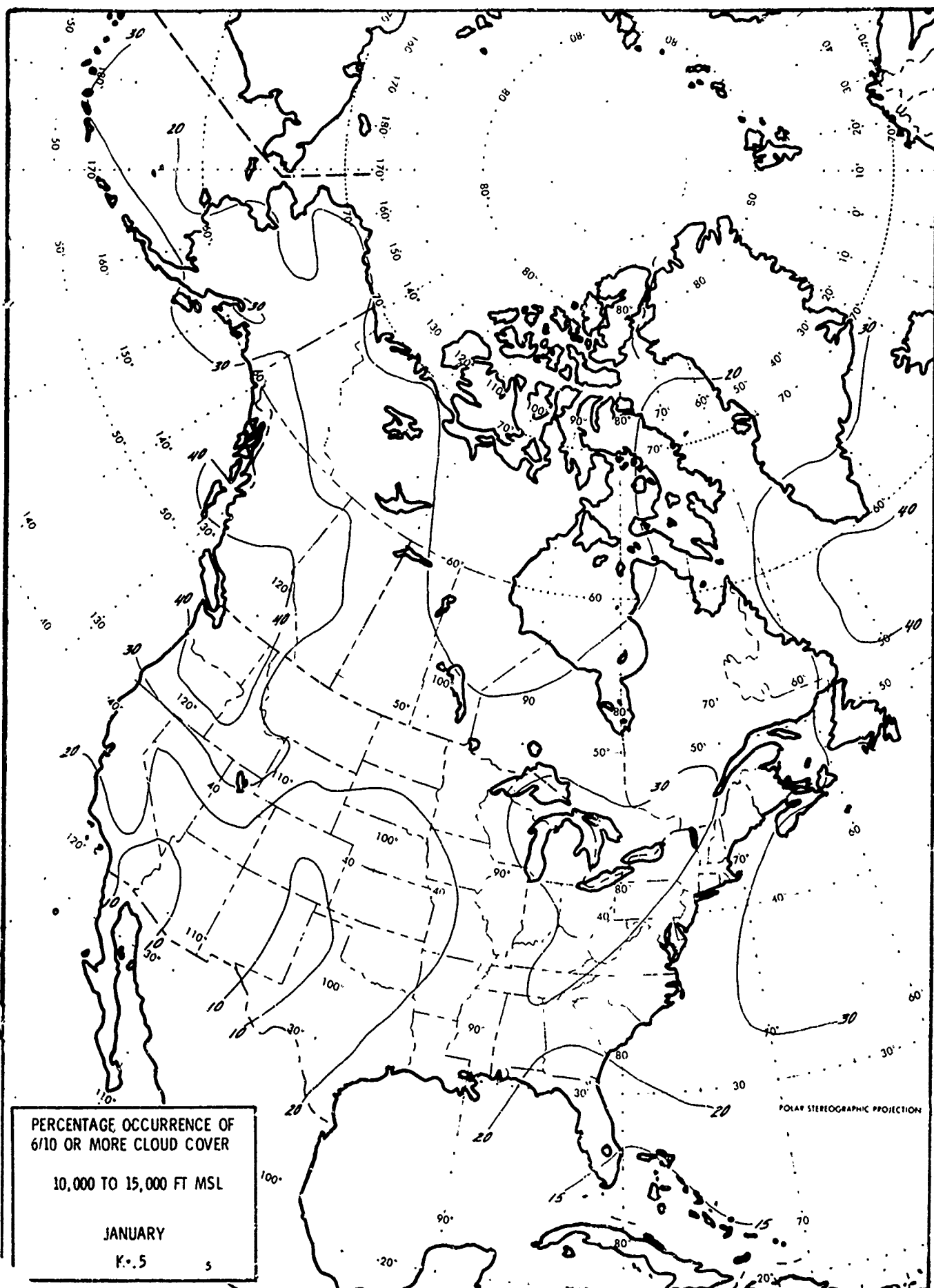
10,000 TO 15,000 FT MSL

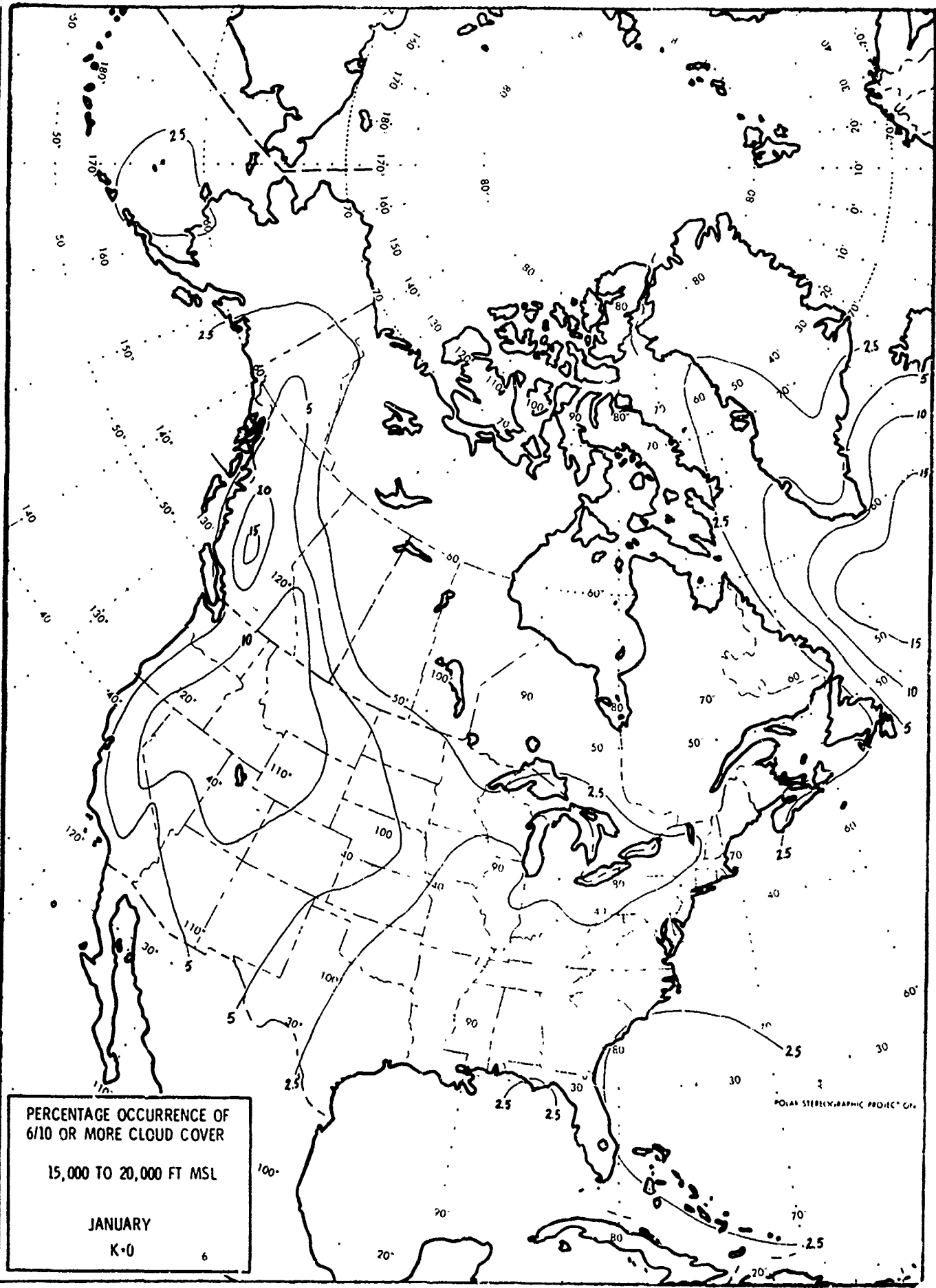
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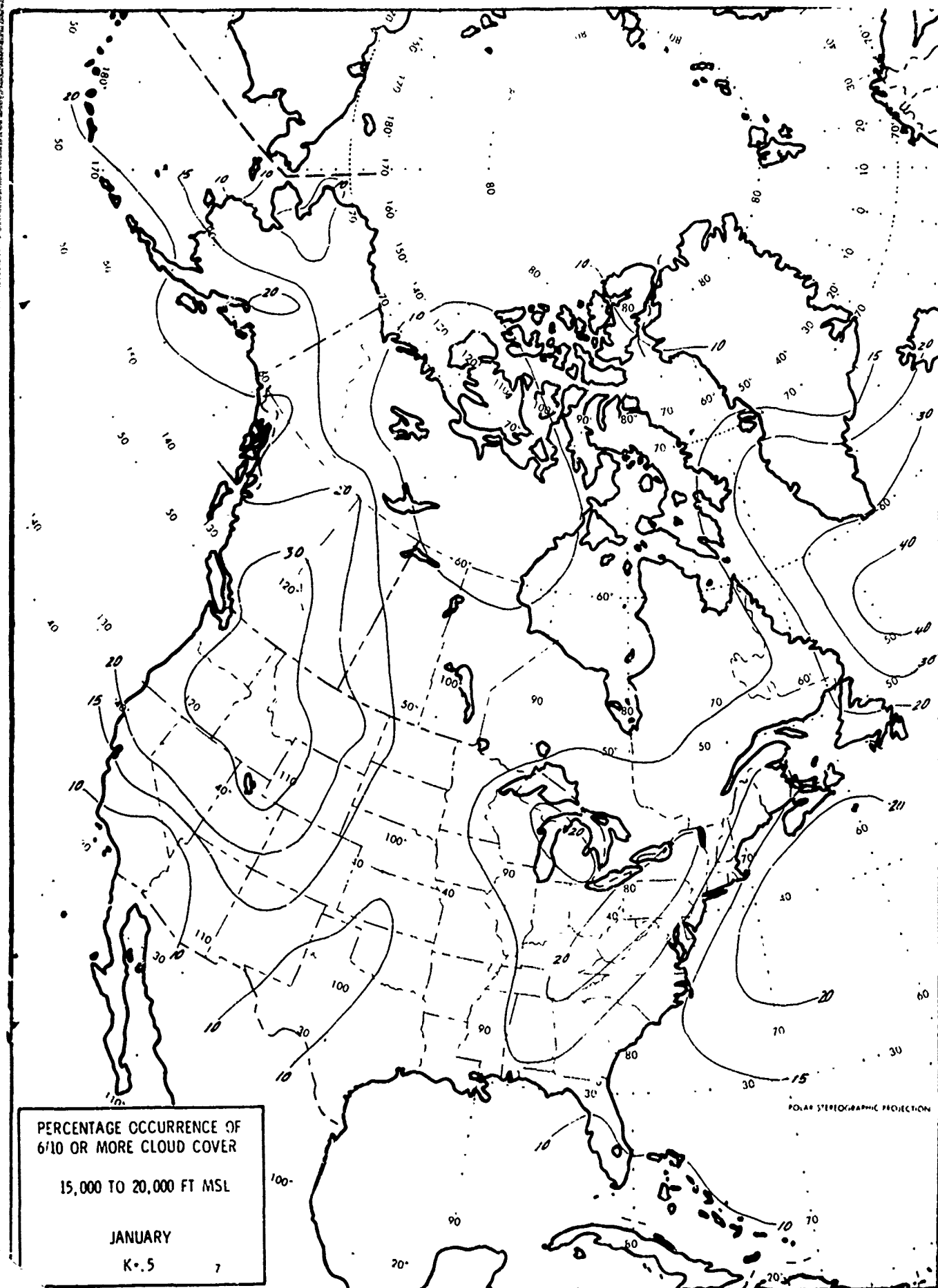
K-0

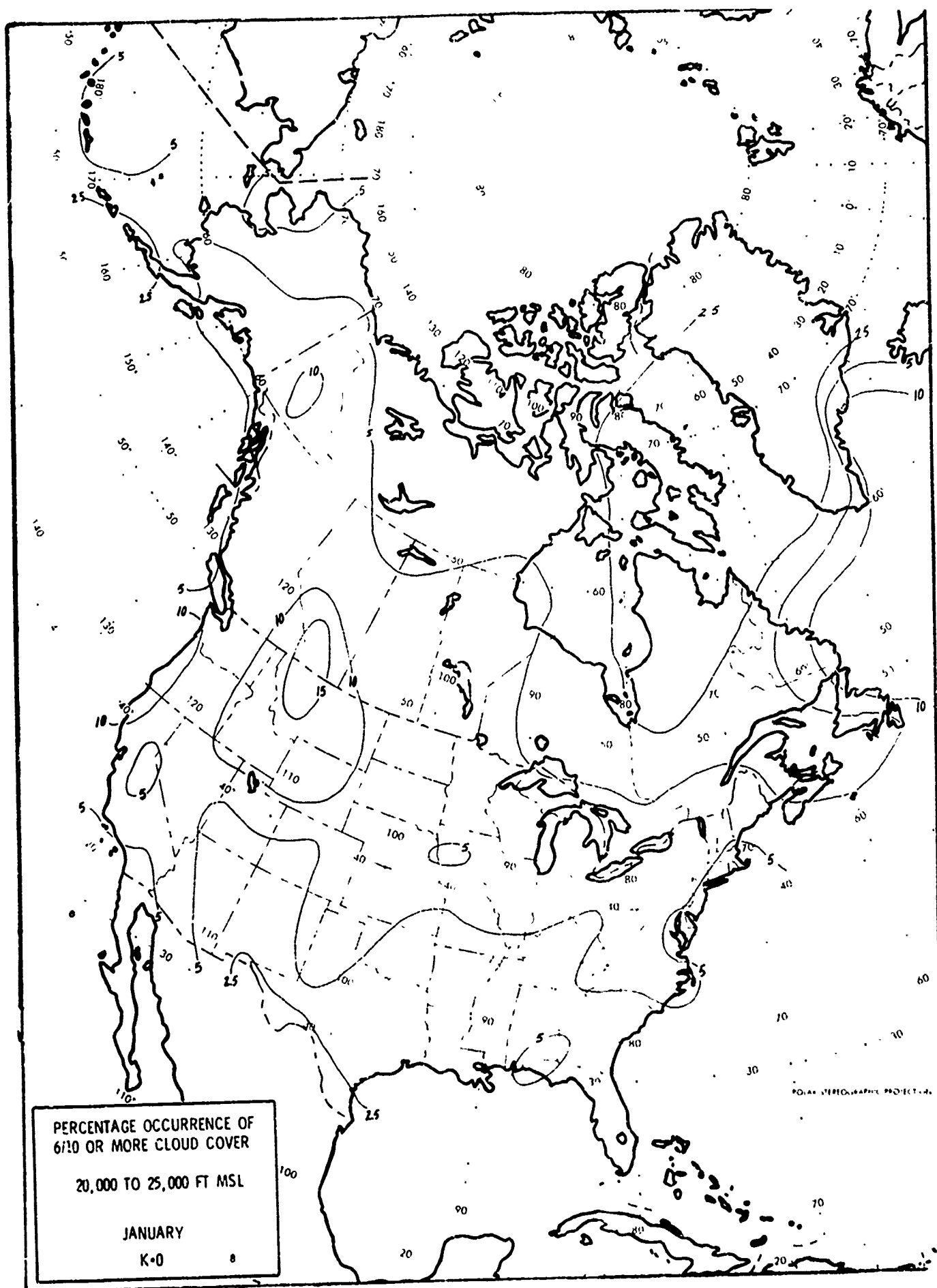
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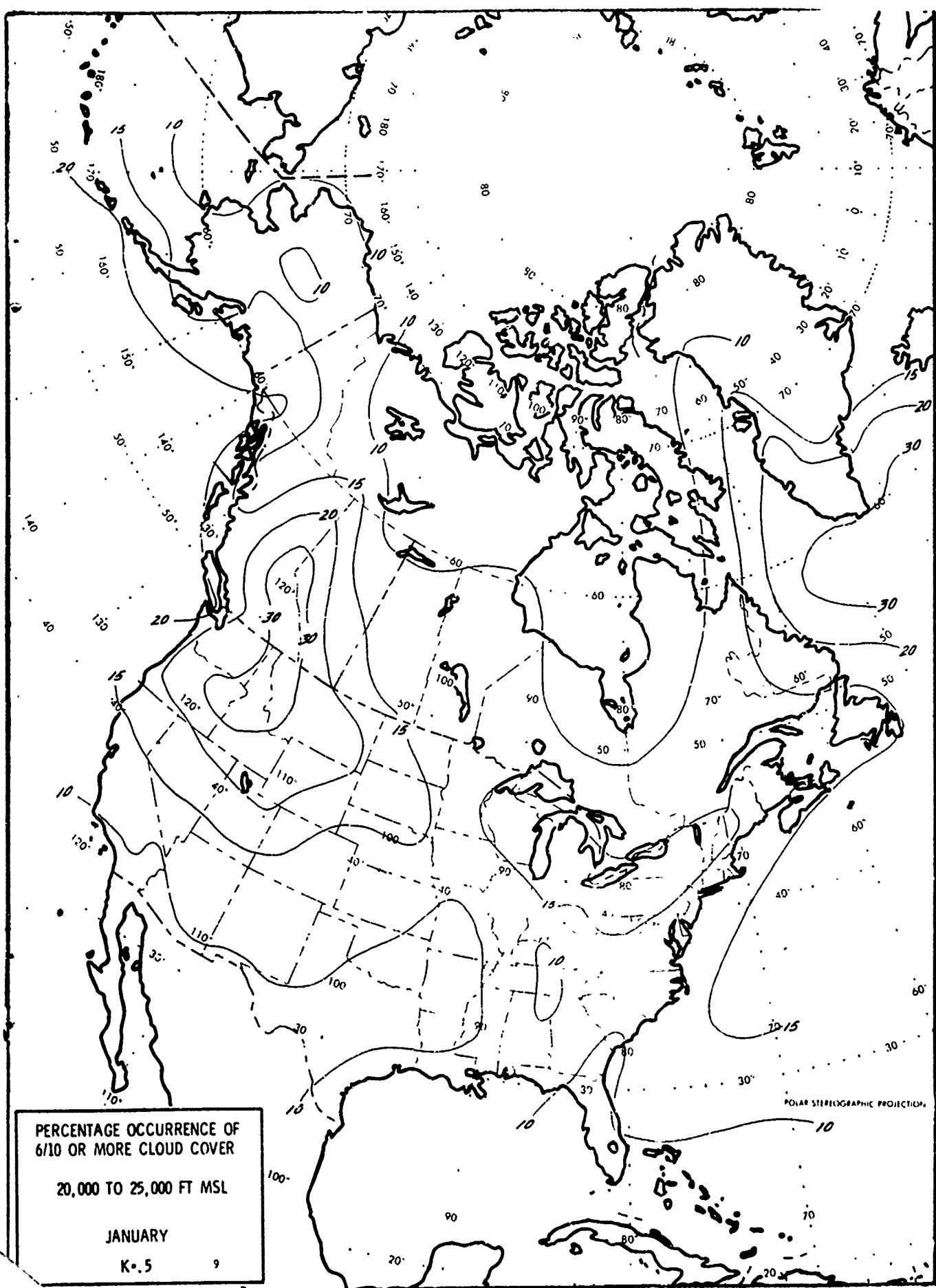
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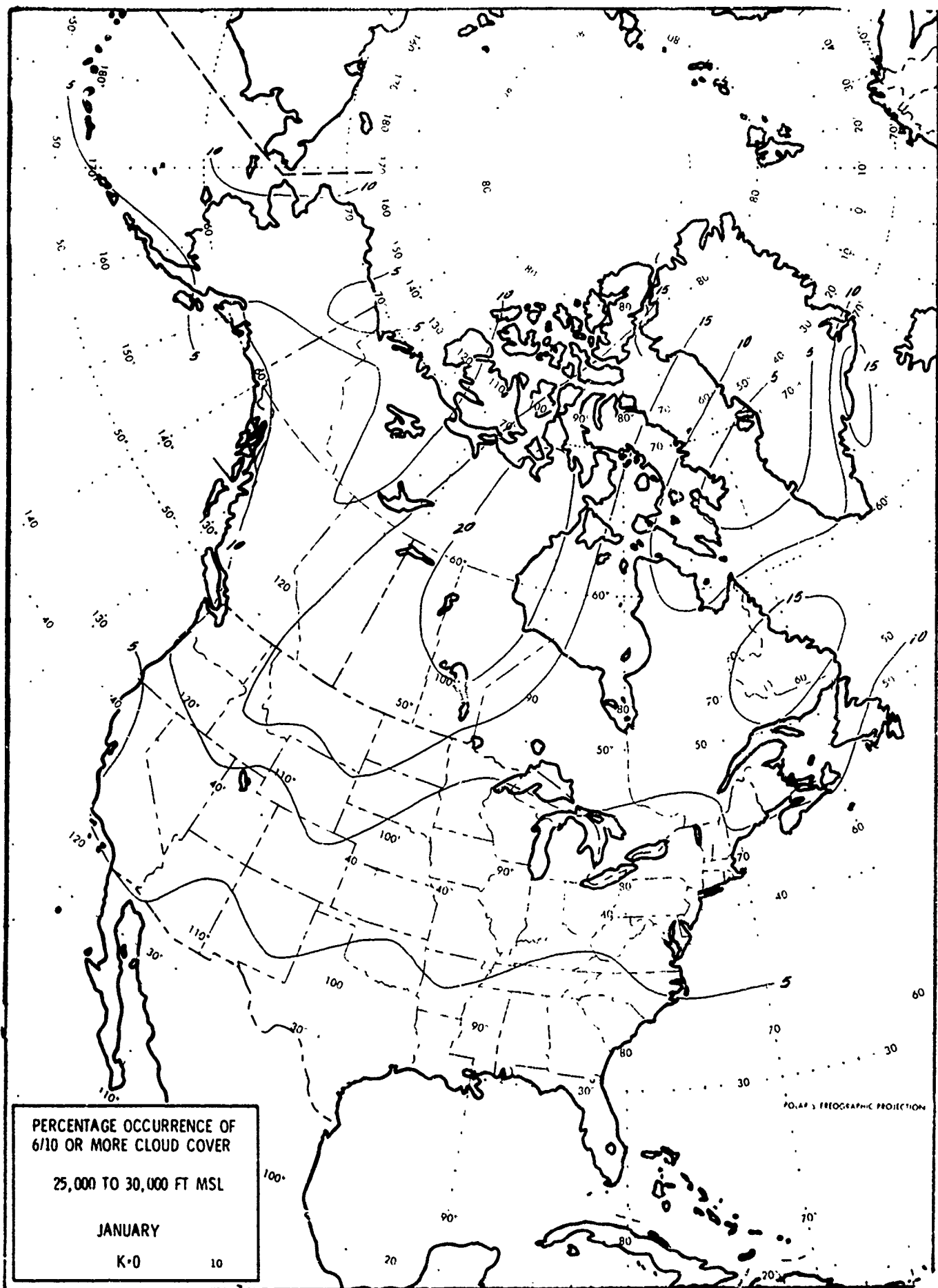


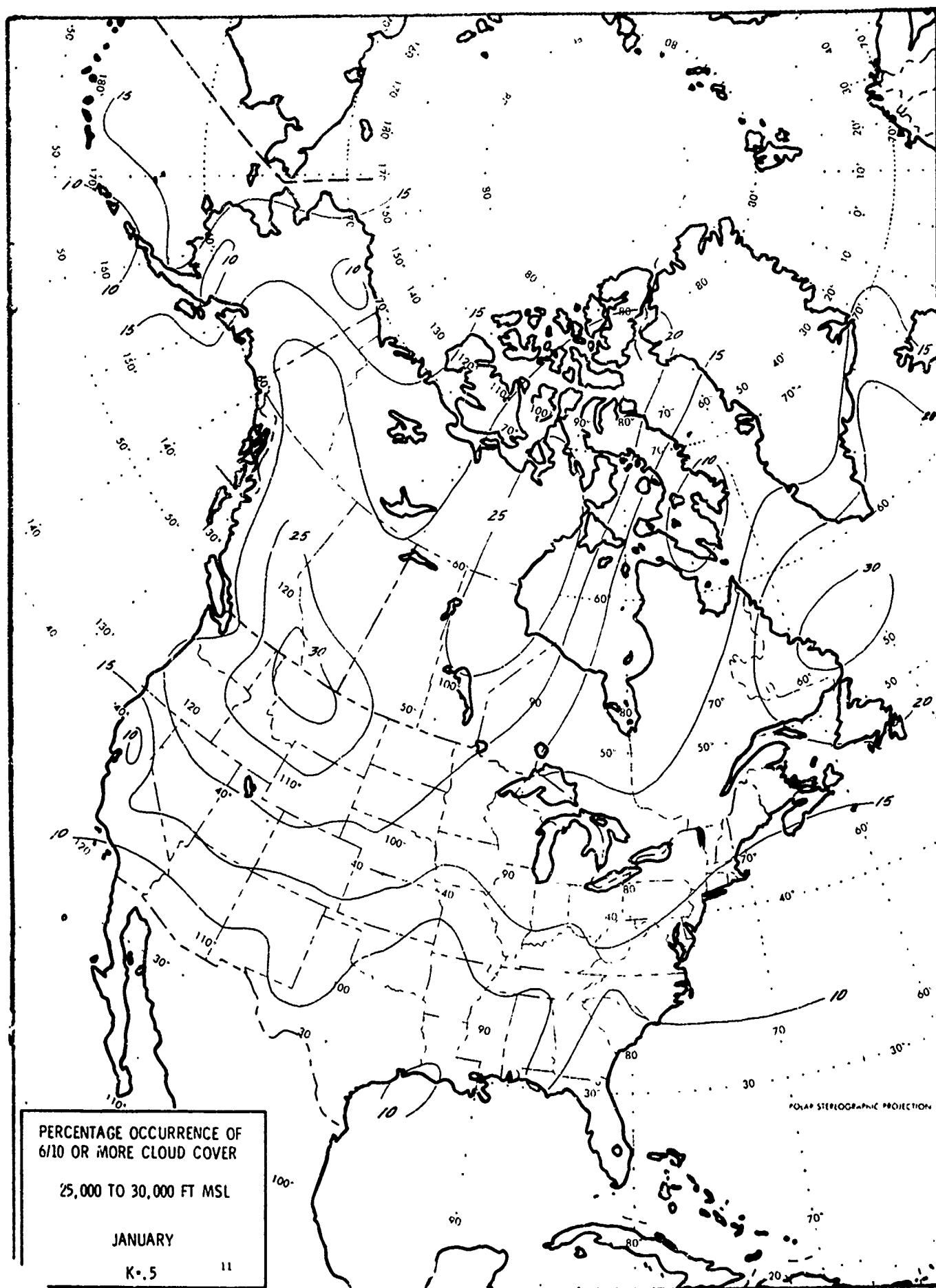












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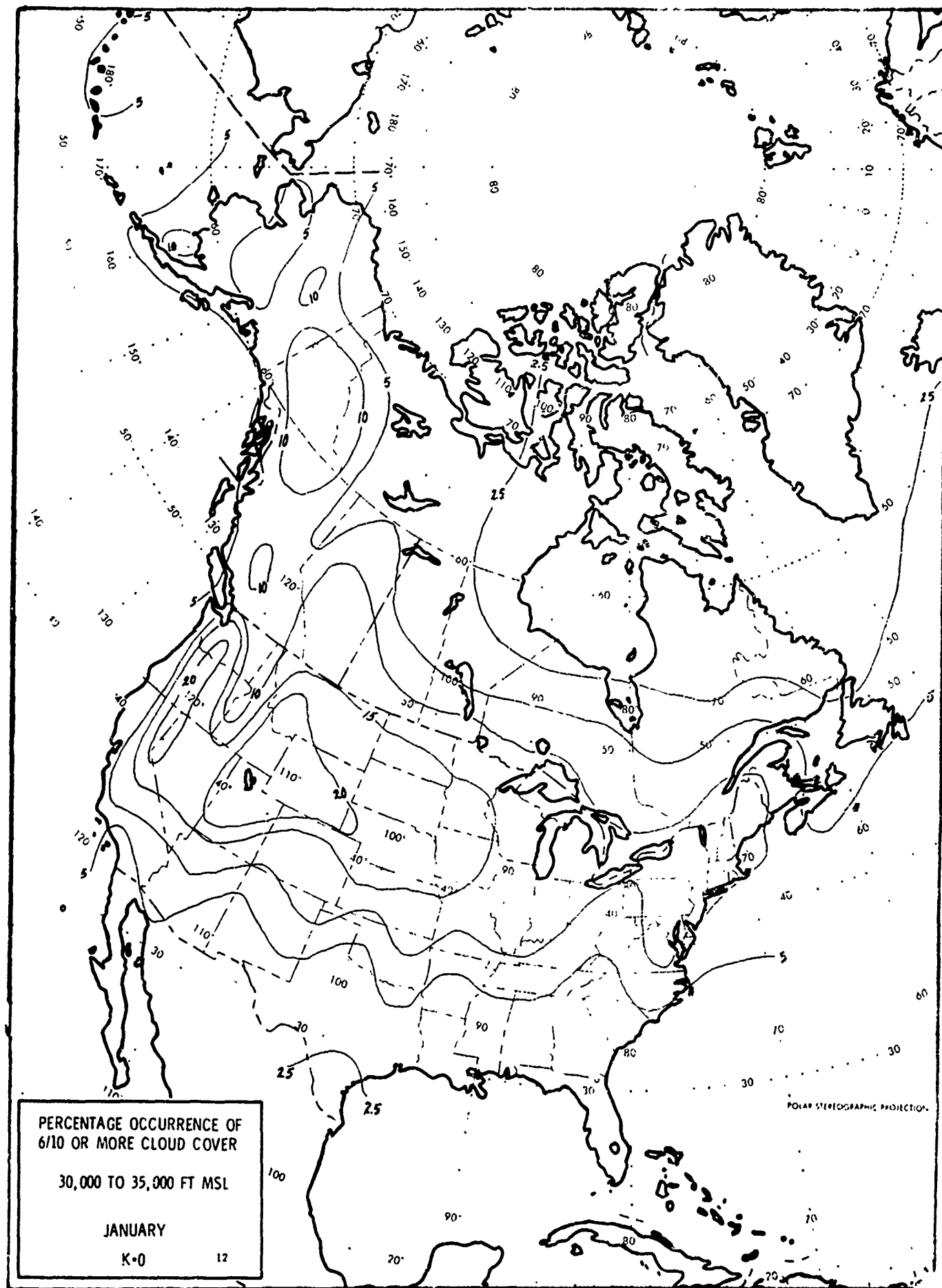
25,000 TO 30,000 FT MSL

JANUARY

K-5

11

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

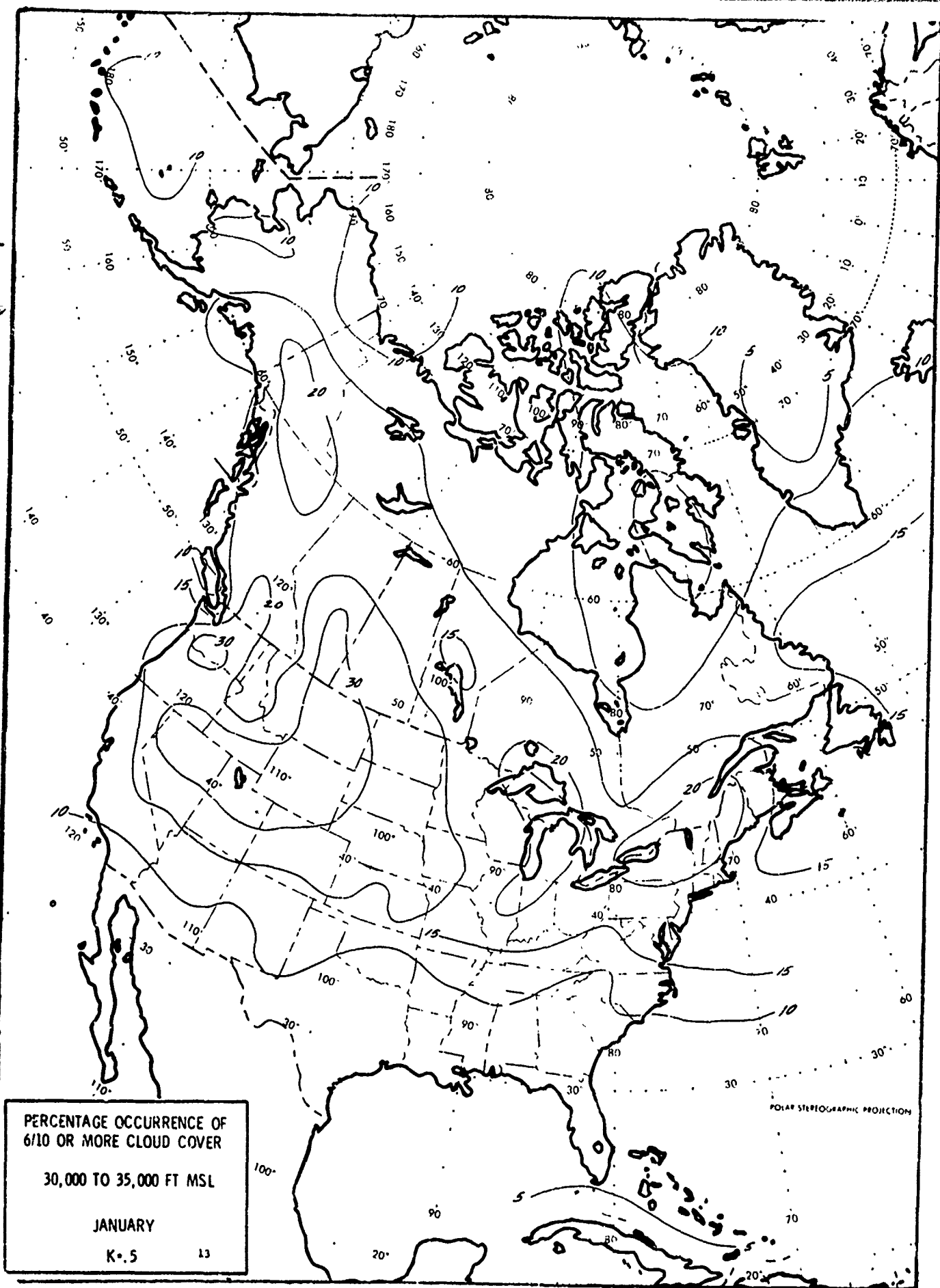
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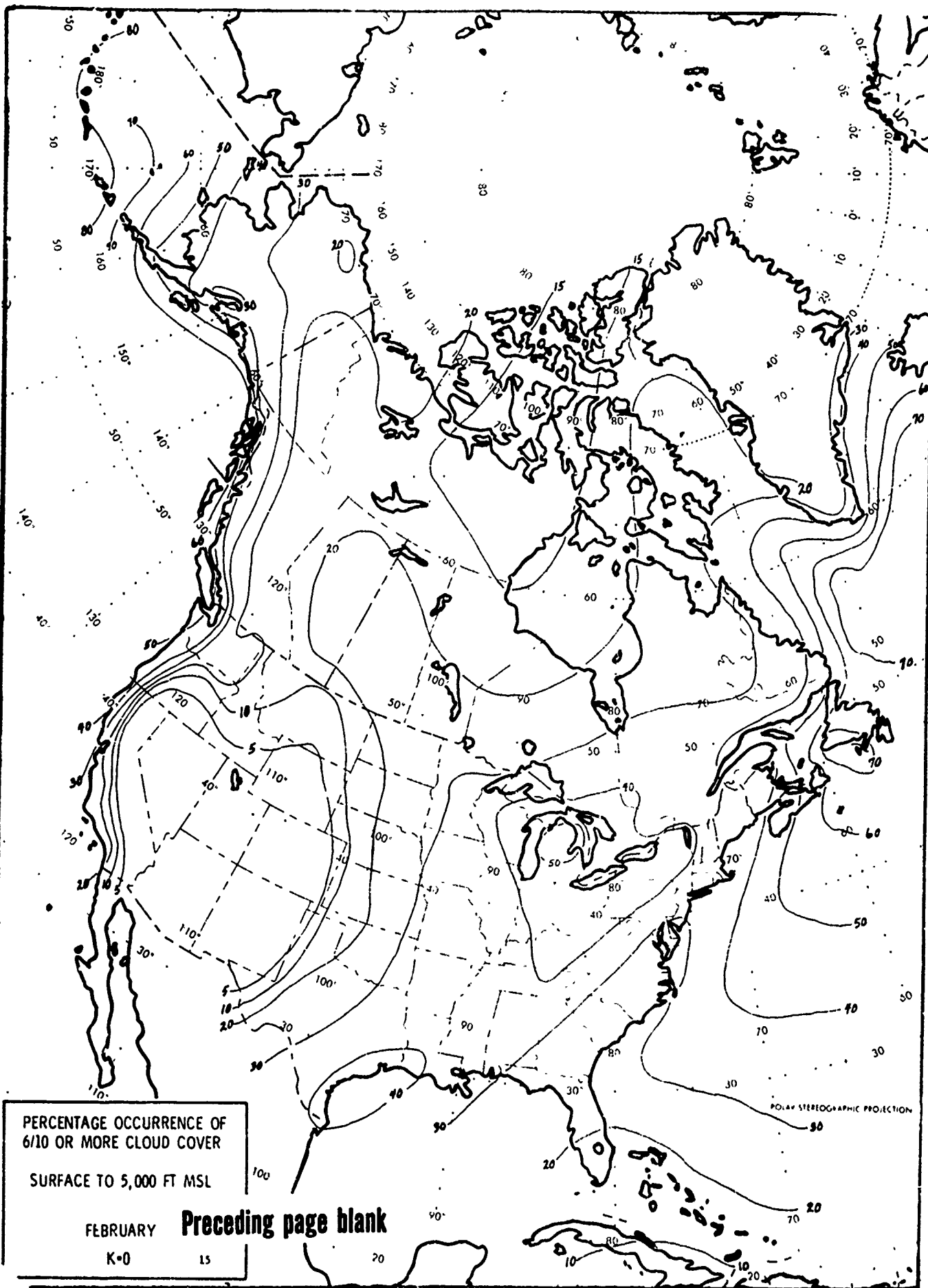
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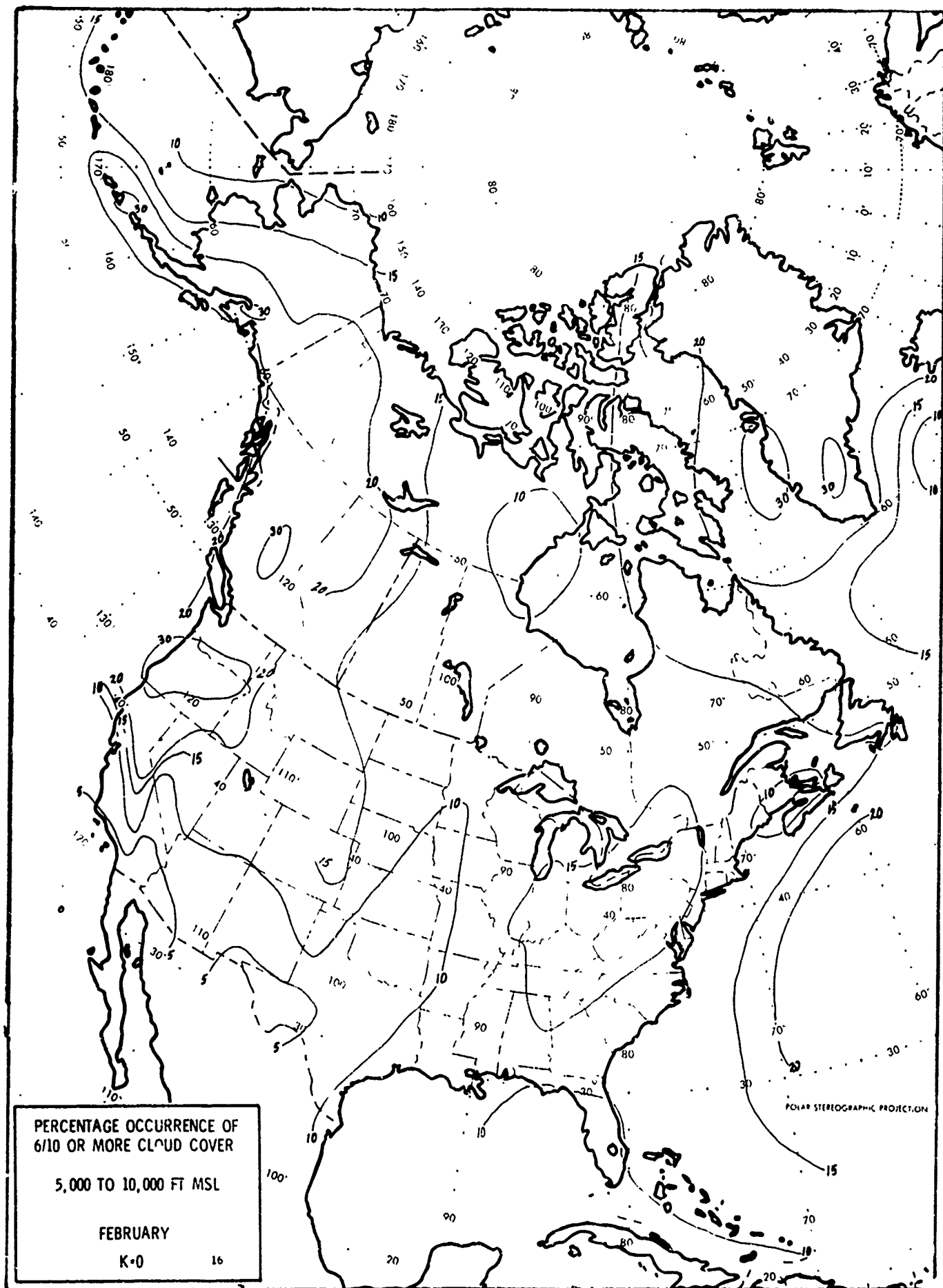
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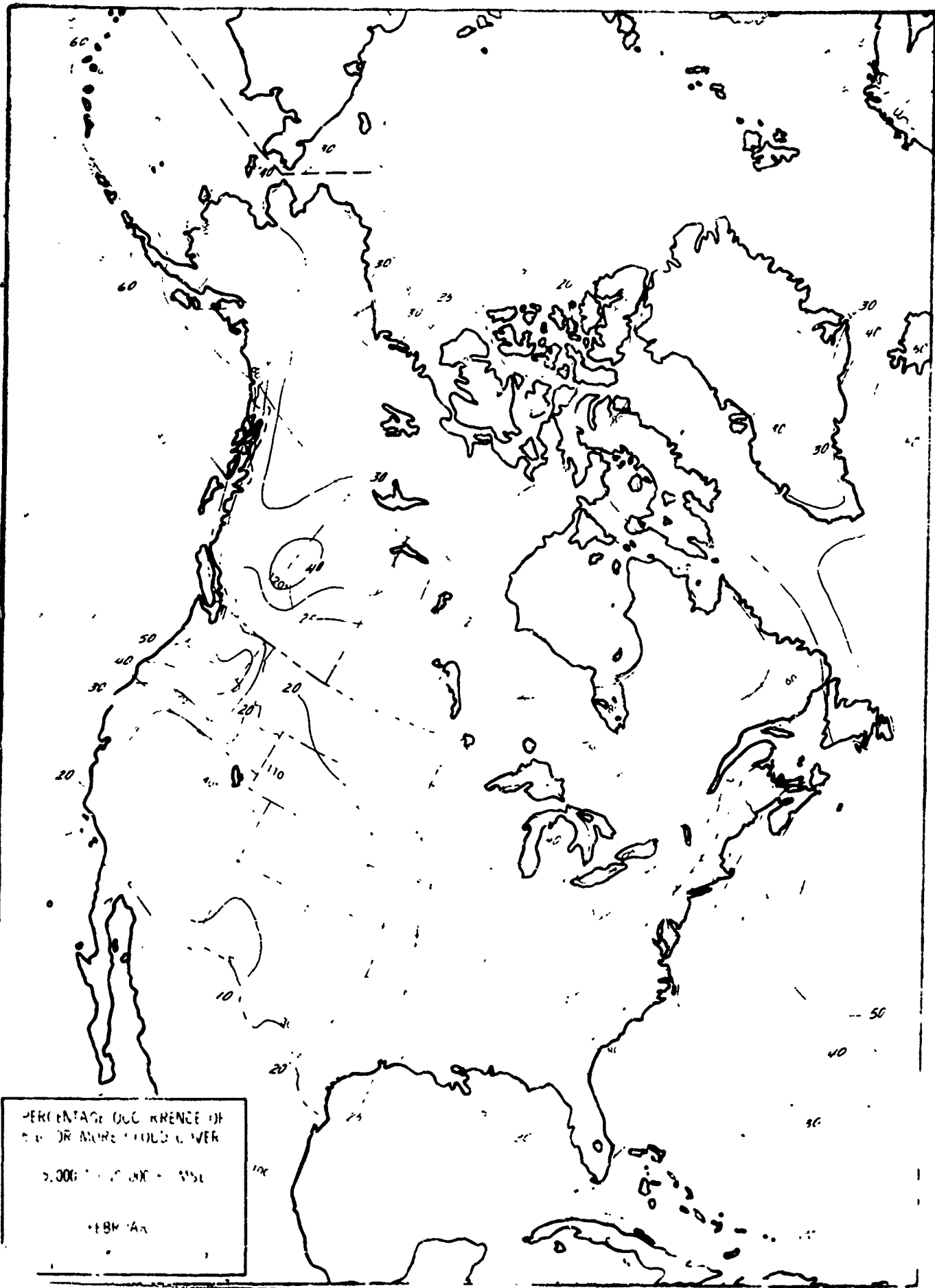
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POLAR STEREOGRAPHIC PROJECTION





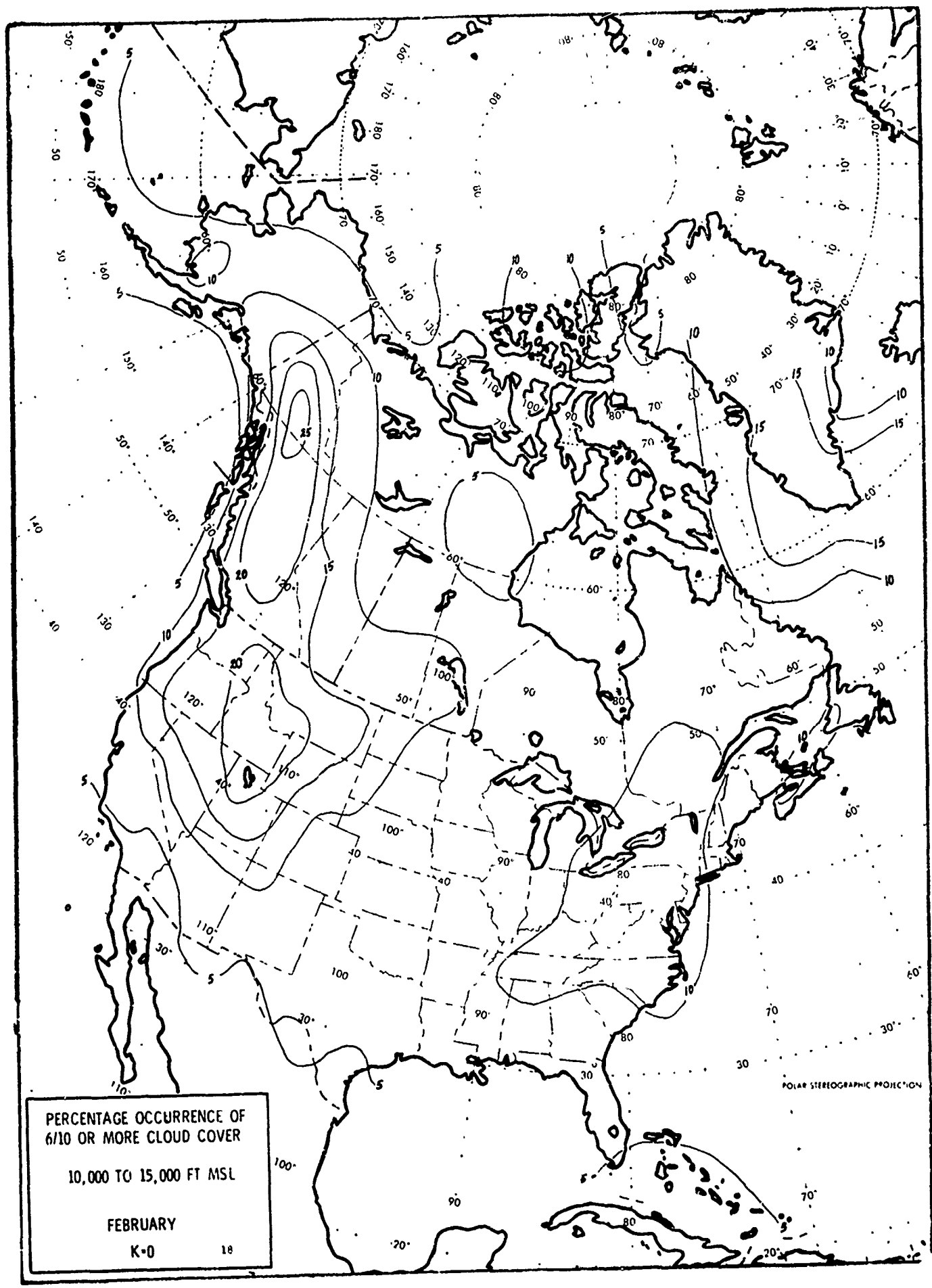




PERCENTAGE OCCURRENCE OF
2,000 FT OR MORE CLOUD COVER

2,000 FT OR MORE CLOUD COVER

18M AN



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

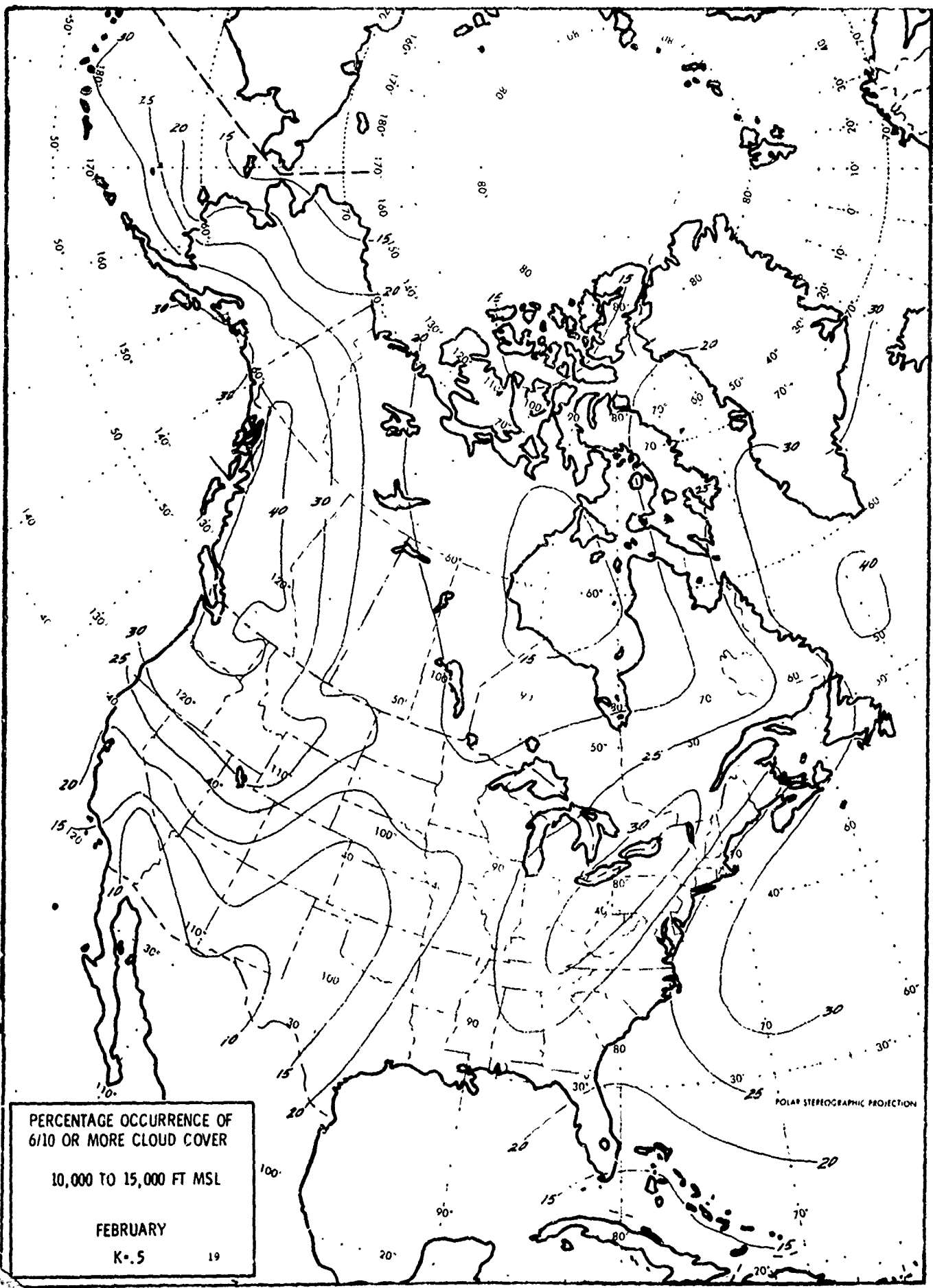
10,000 TO 15,000 FT MSL

FEBRUARY

K-0

18

POLAR STEREOGRAPHIC PROJECTION



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6/10 OR MORE CLOUD COVER

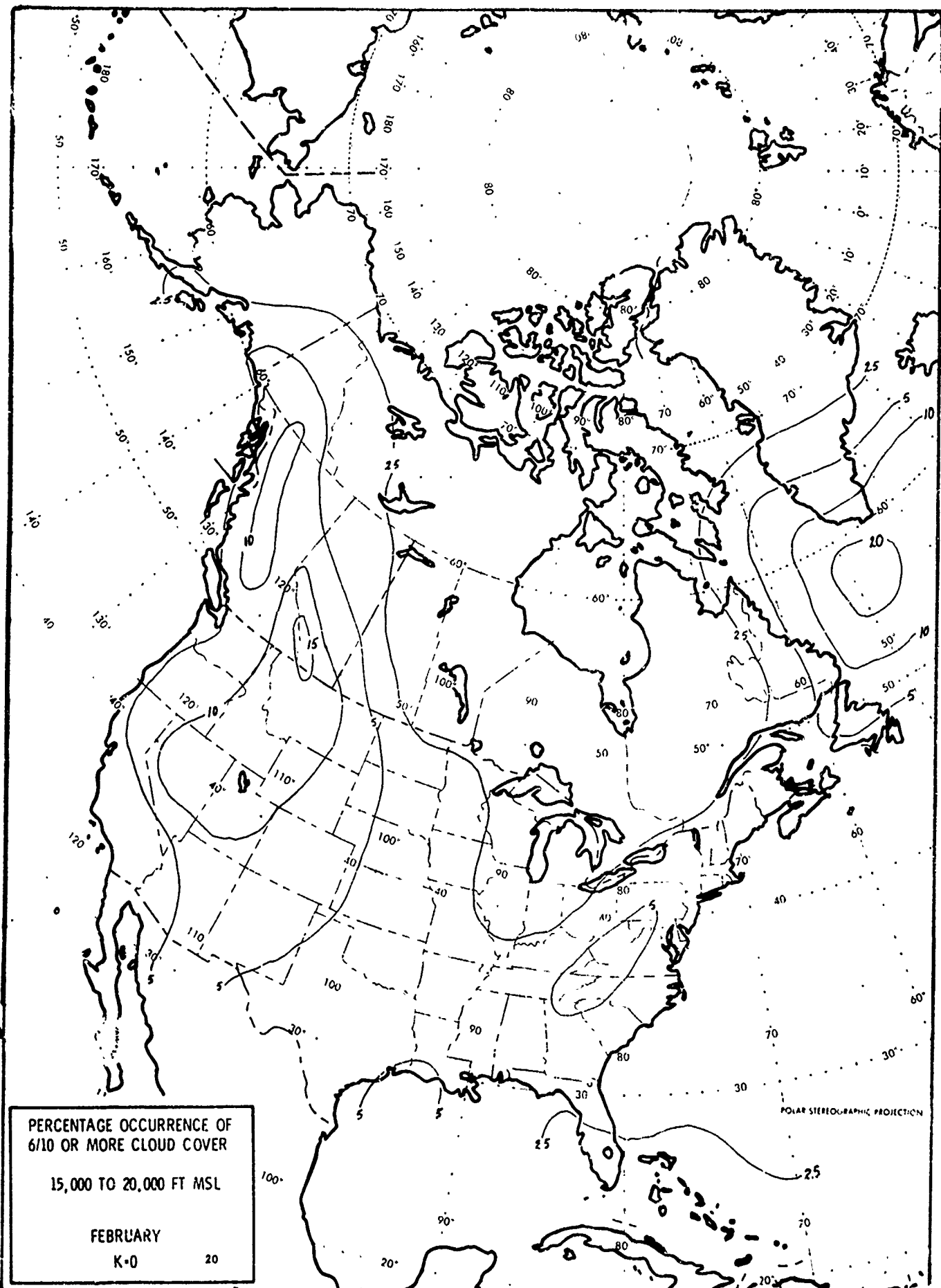
10,000 TO 15,000 FT MSL

FEBRUARY

K-5

19

POLAR STEREOGRAPHIC PROJECTION



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6/10 OR MORE CLOUD COVER

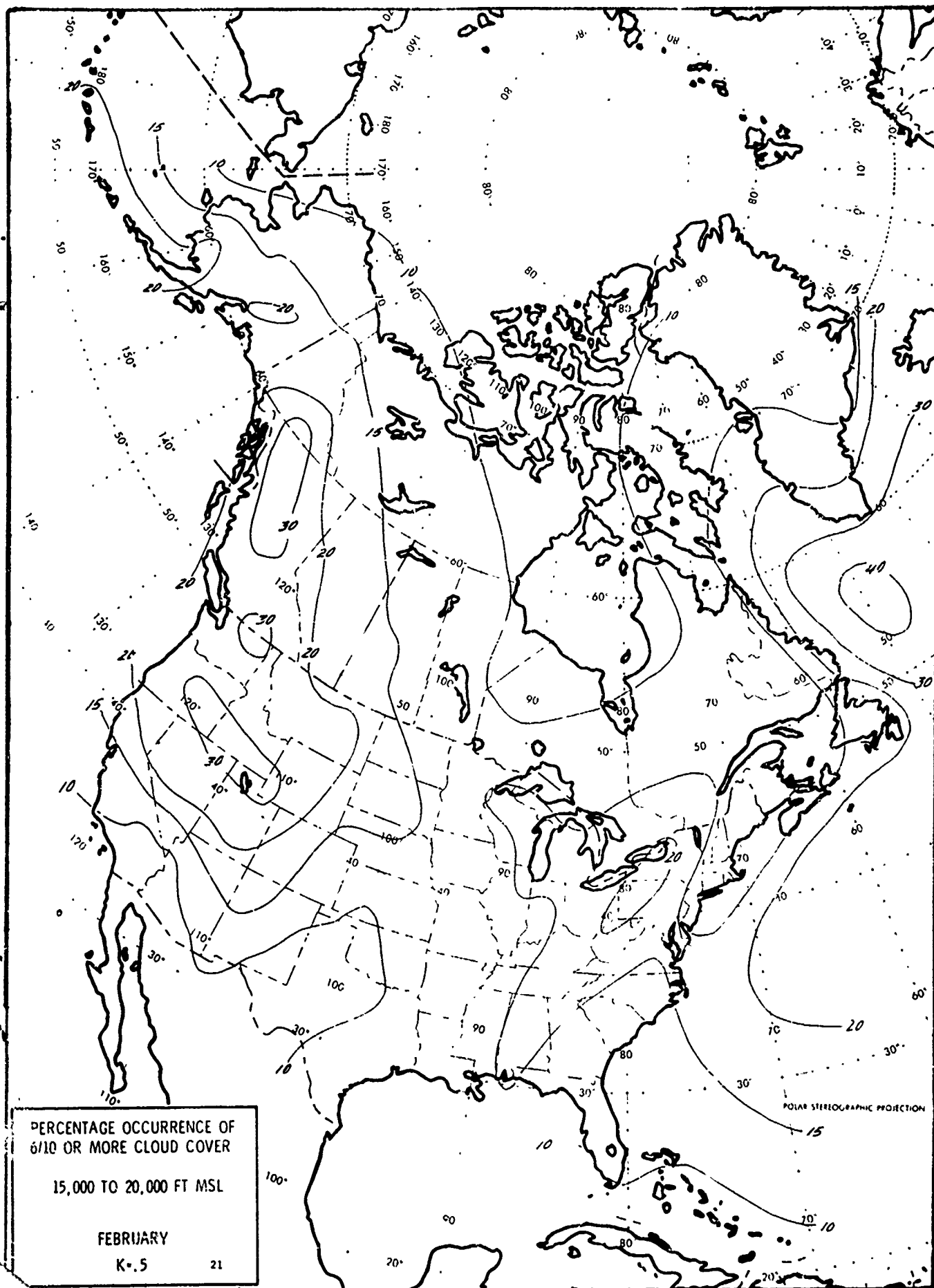
15,000 TO 20,000 FT MSL

FEBRUARY

K-0

20

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

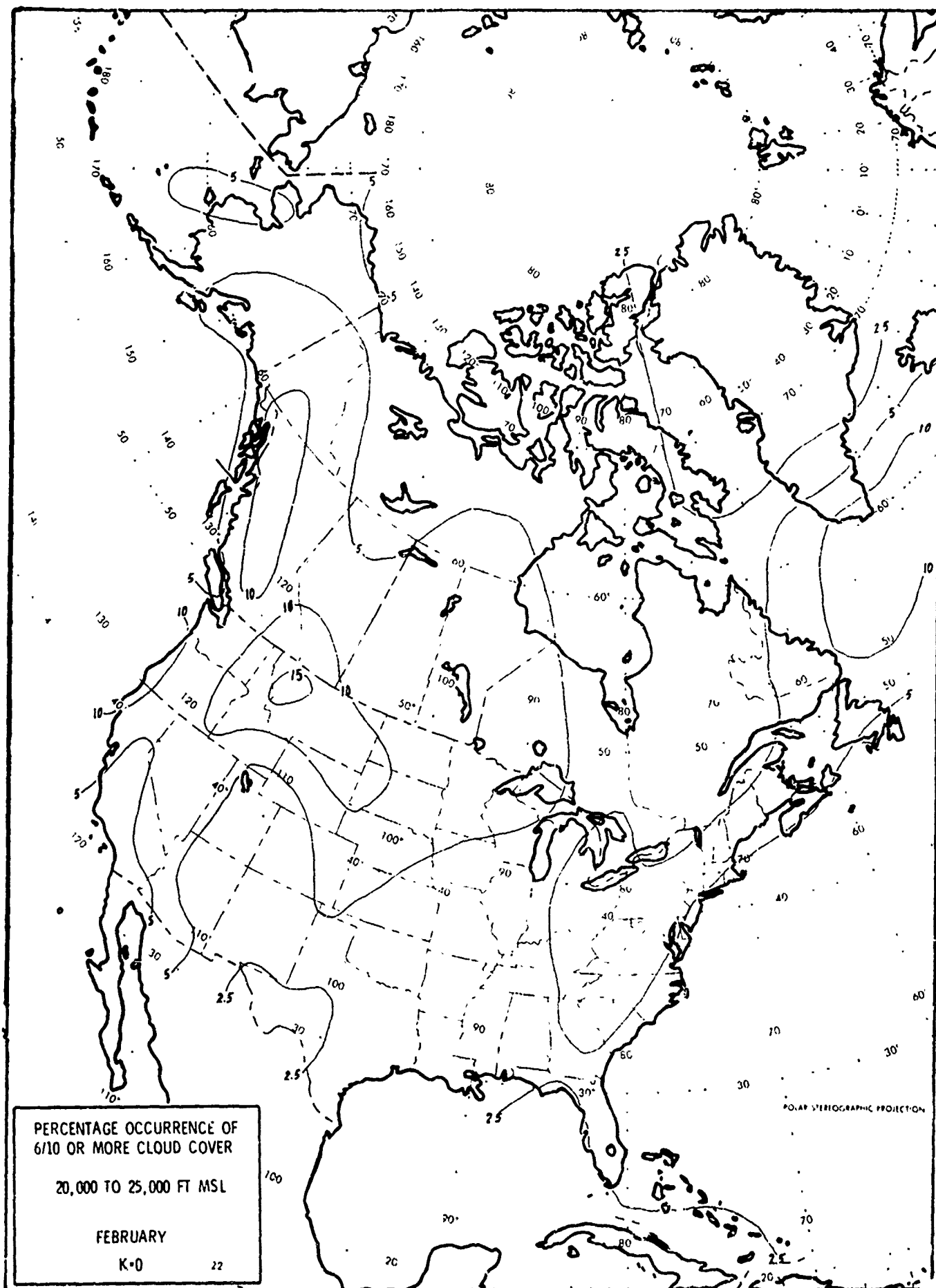
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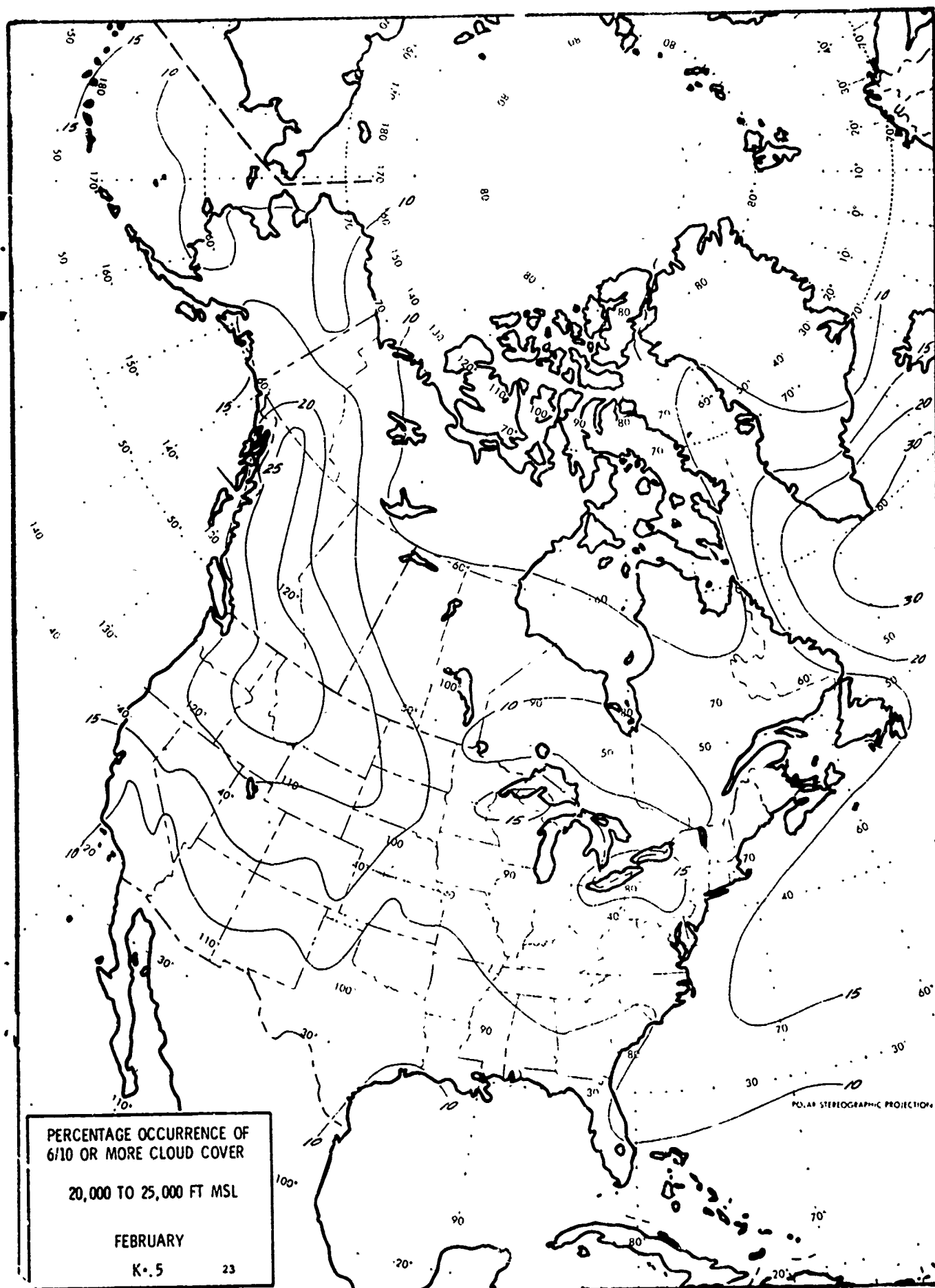
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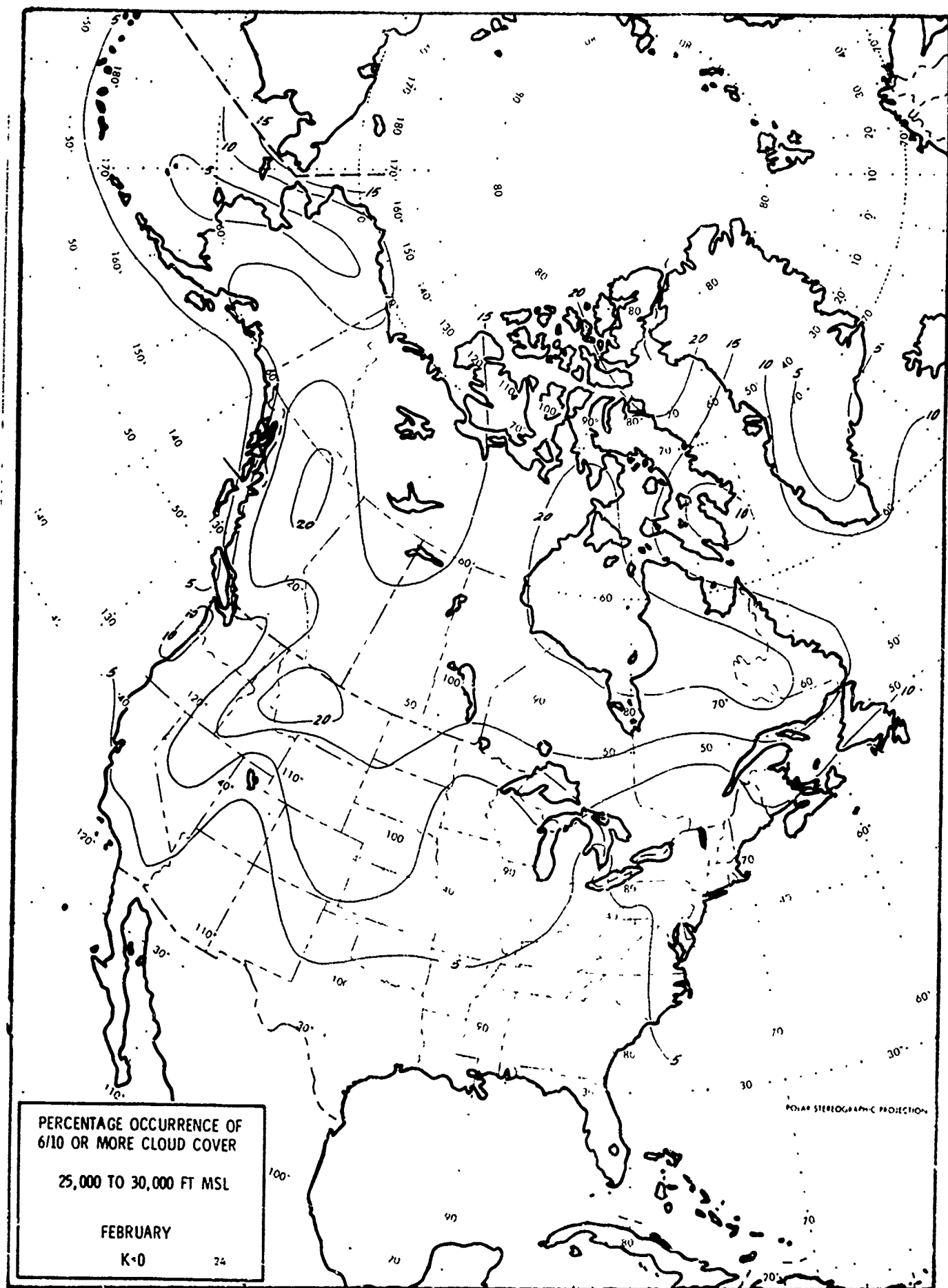
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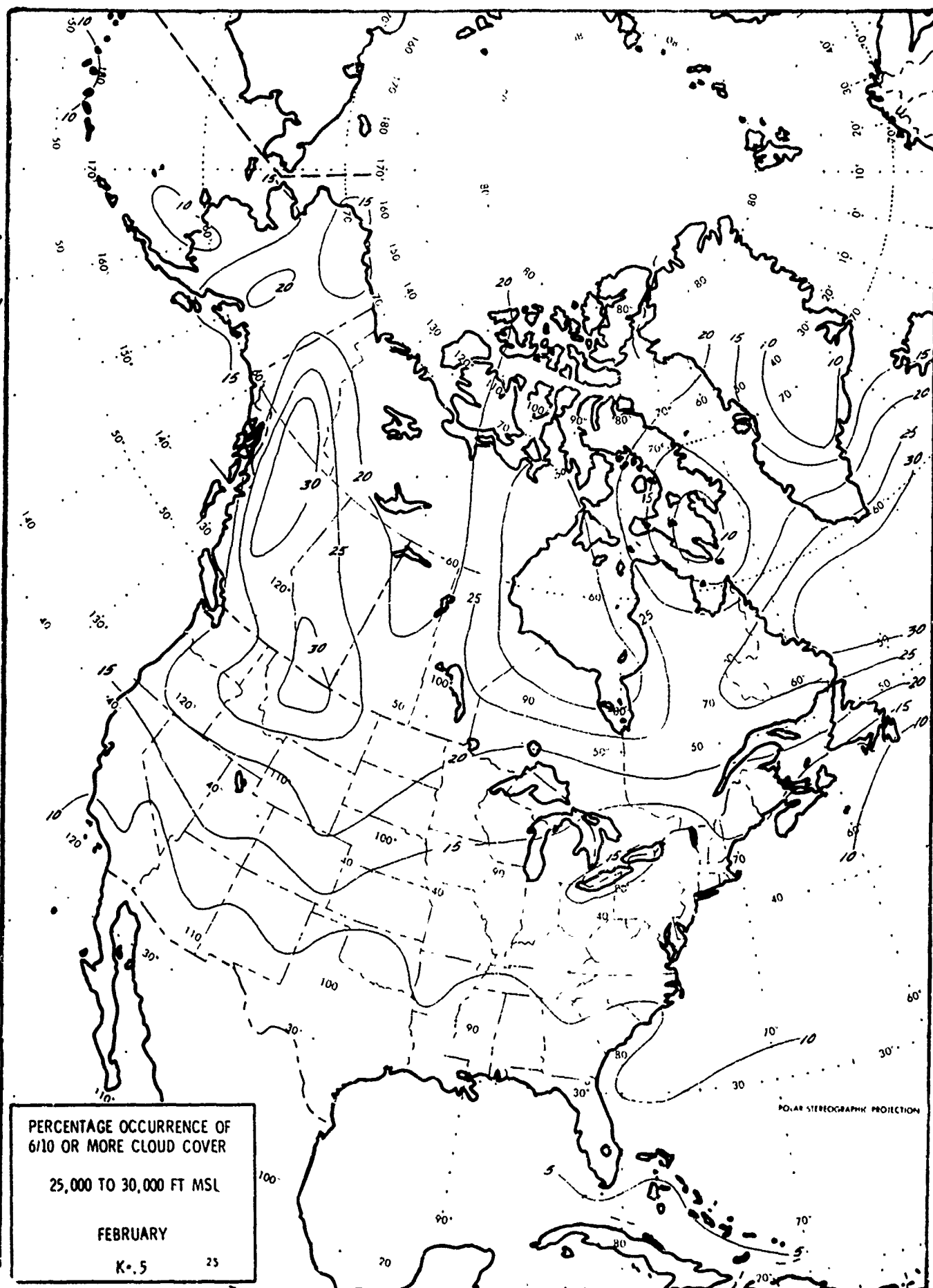
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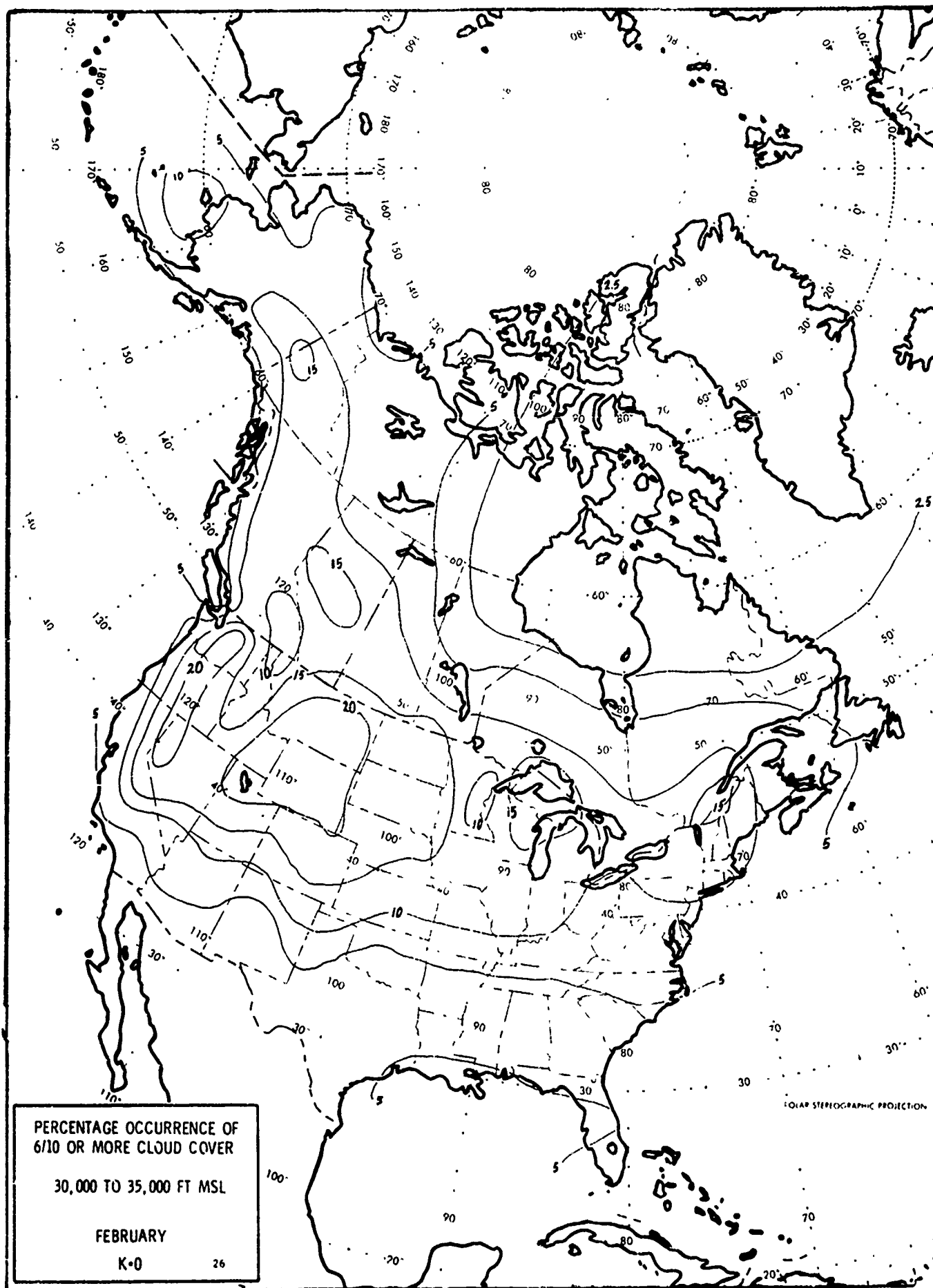
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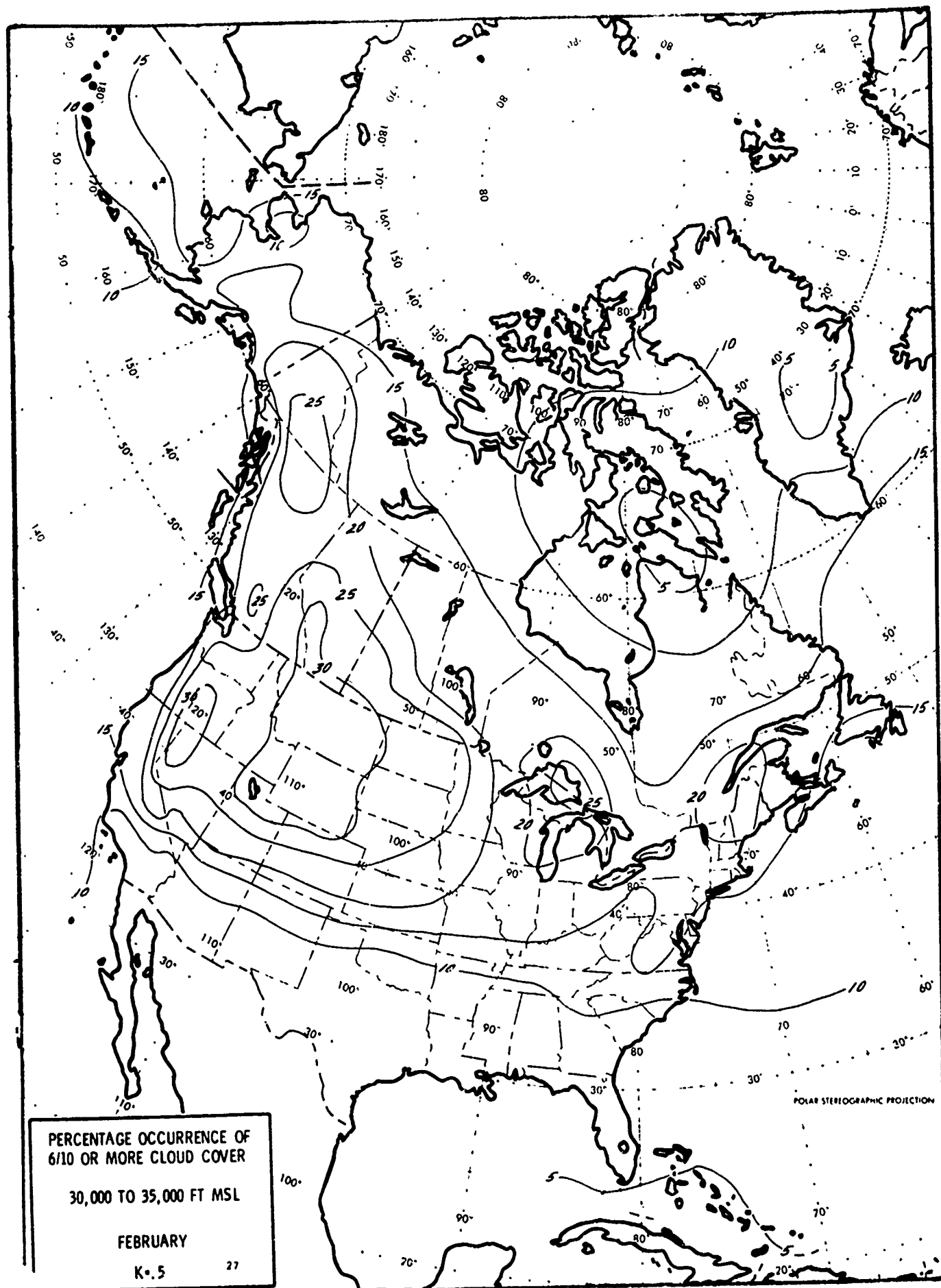


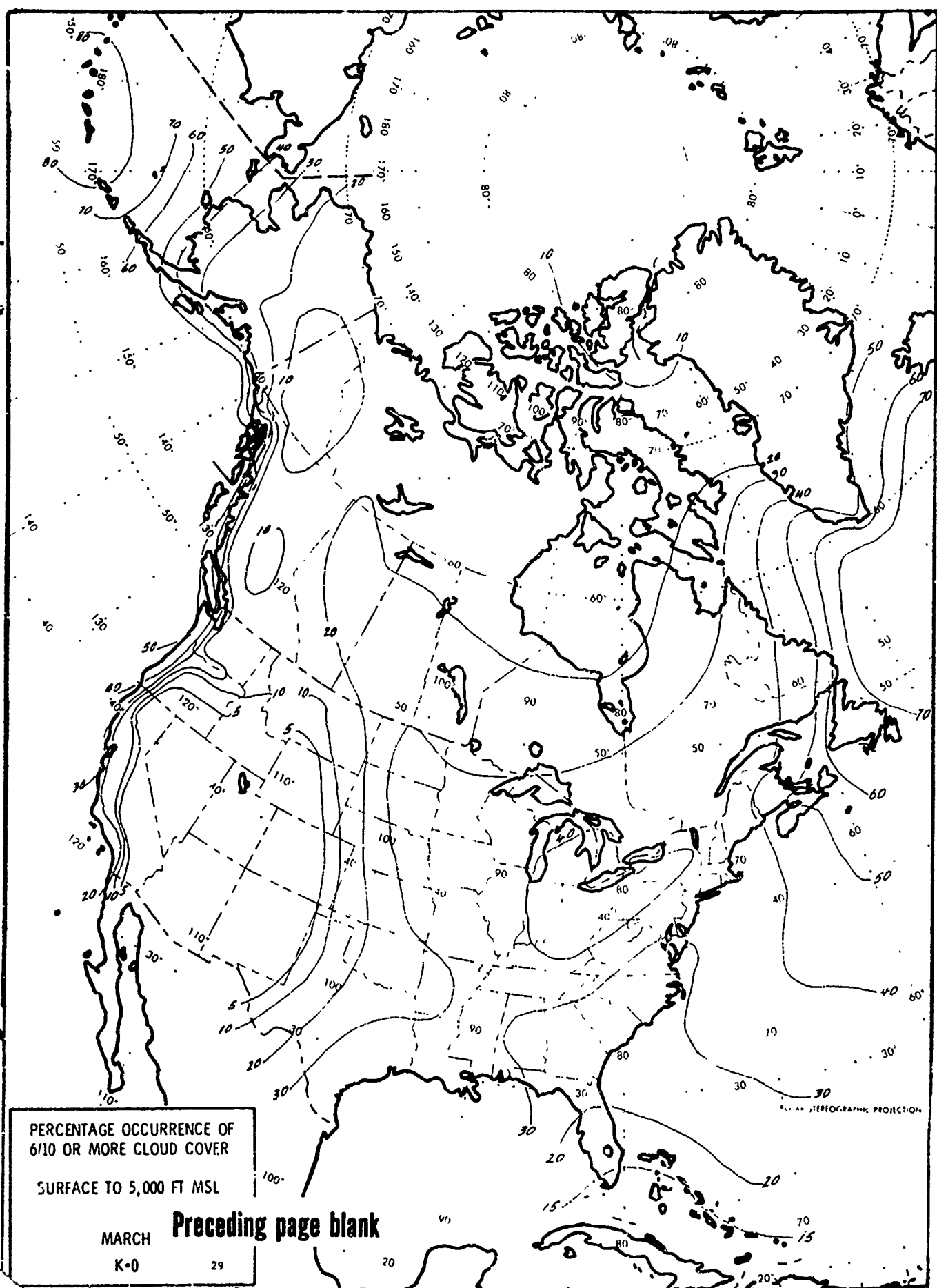


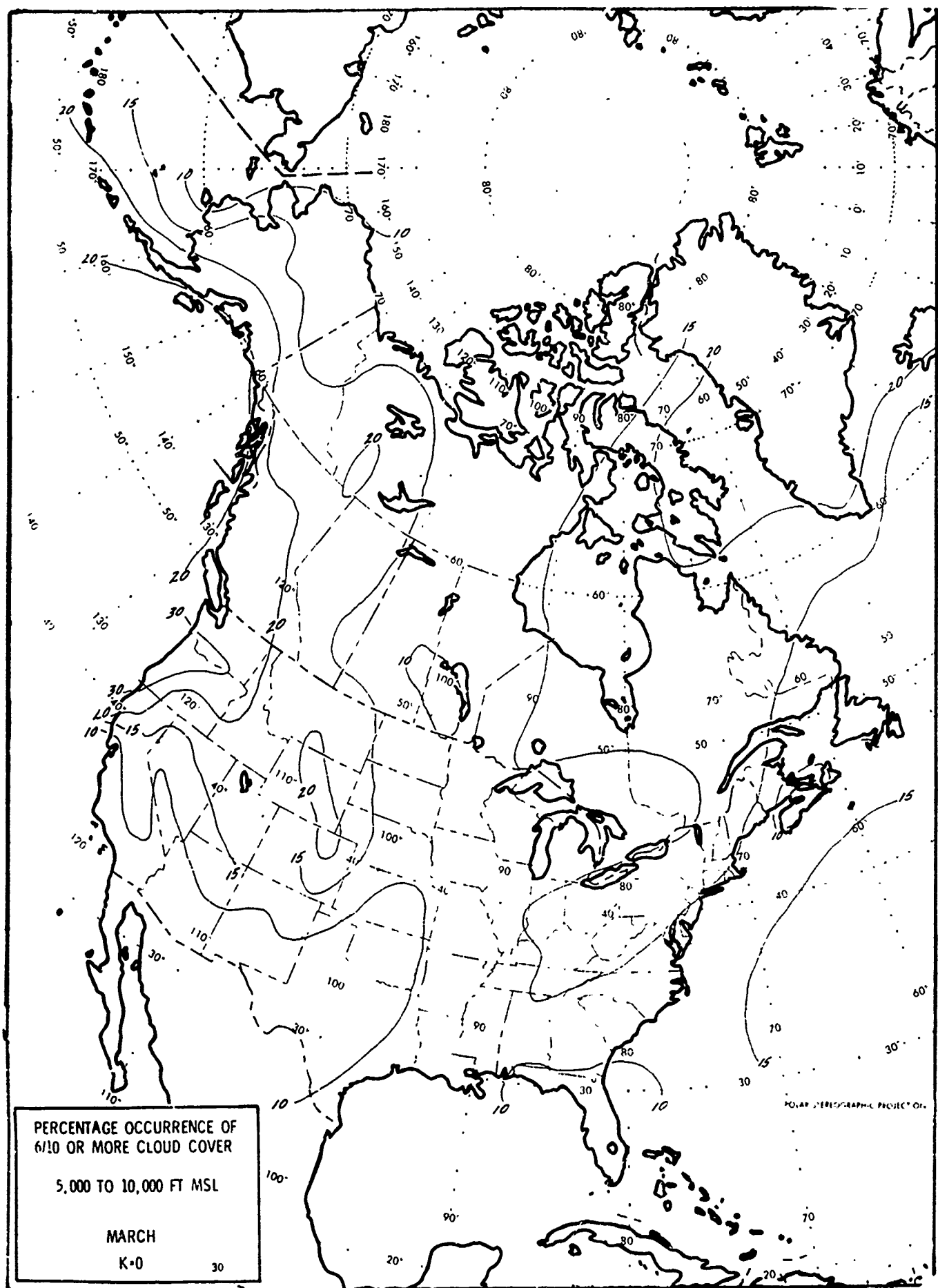


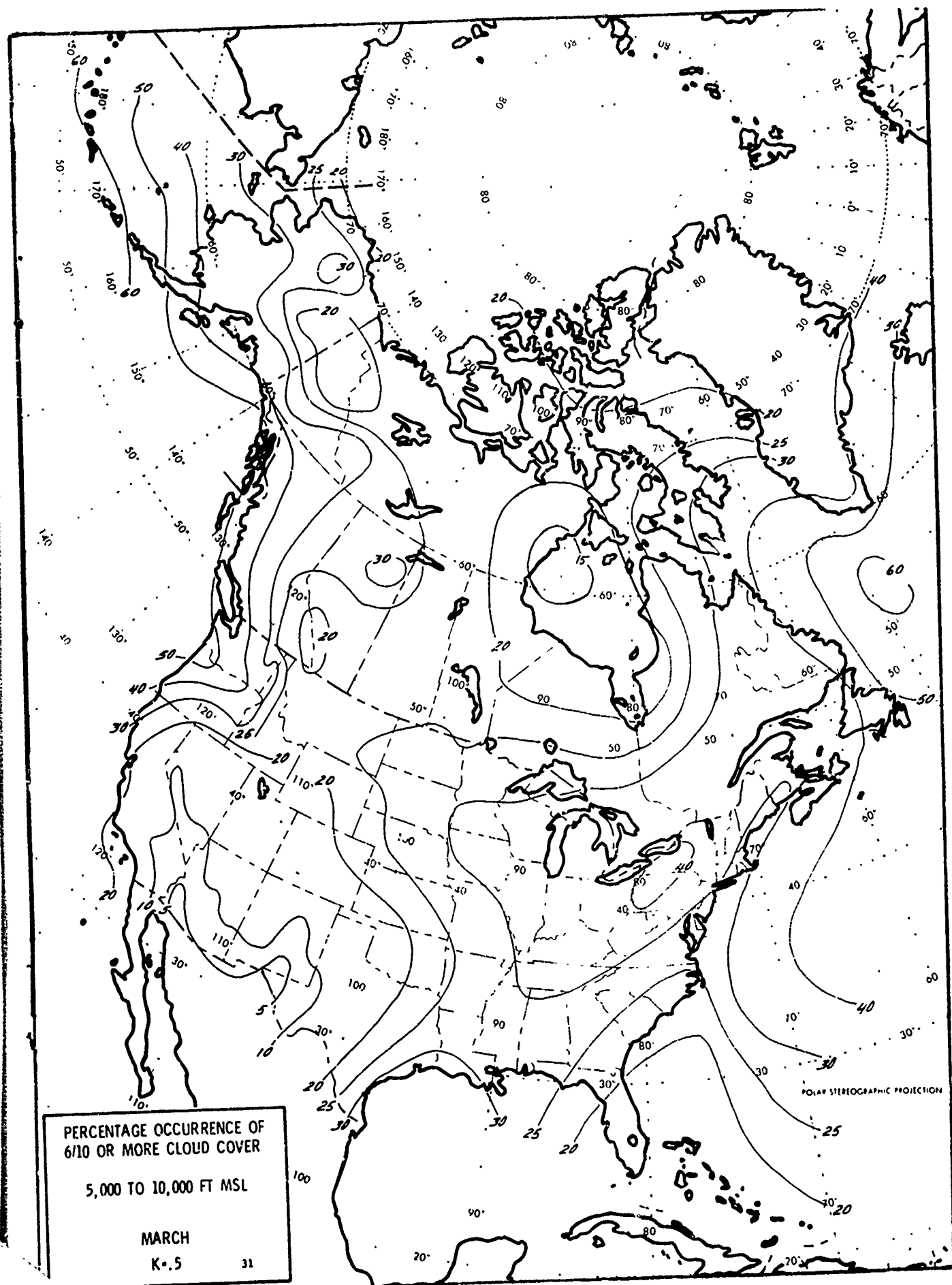


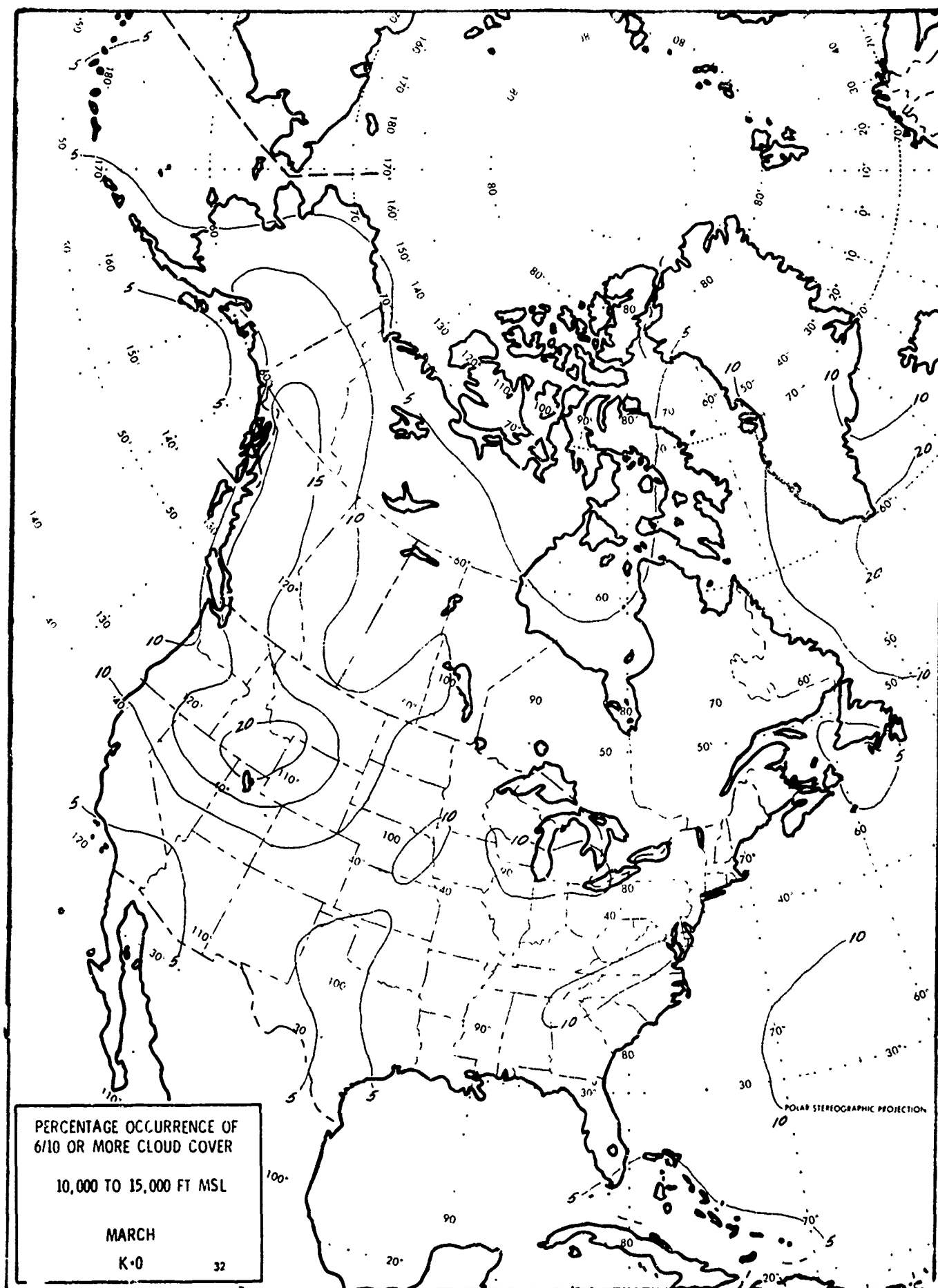


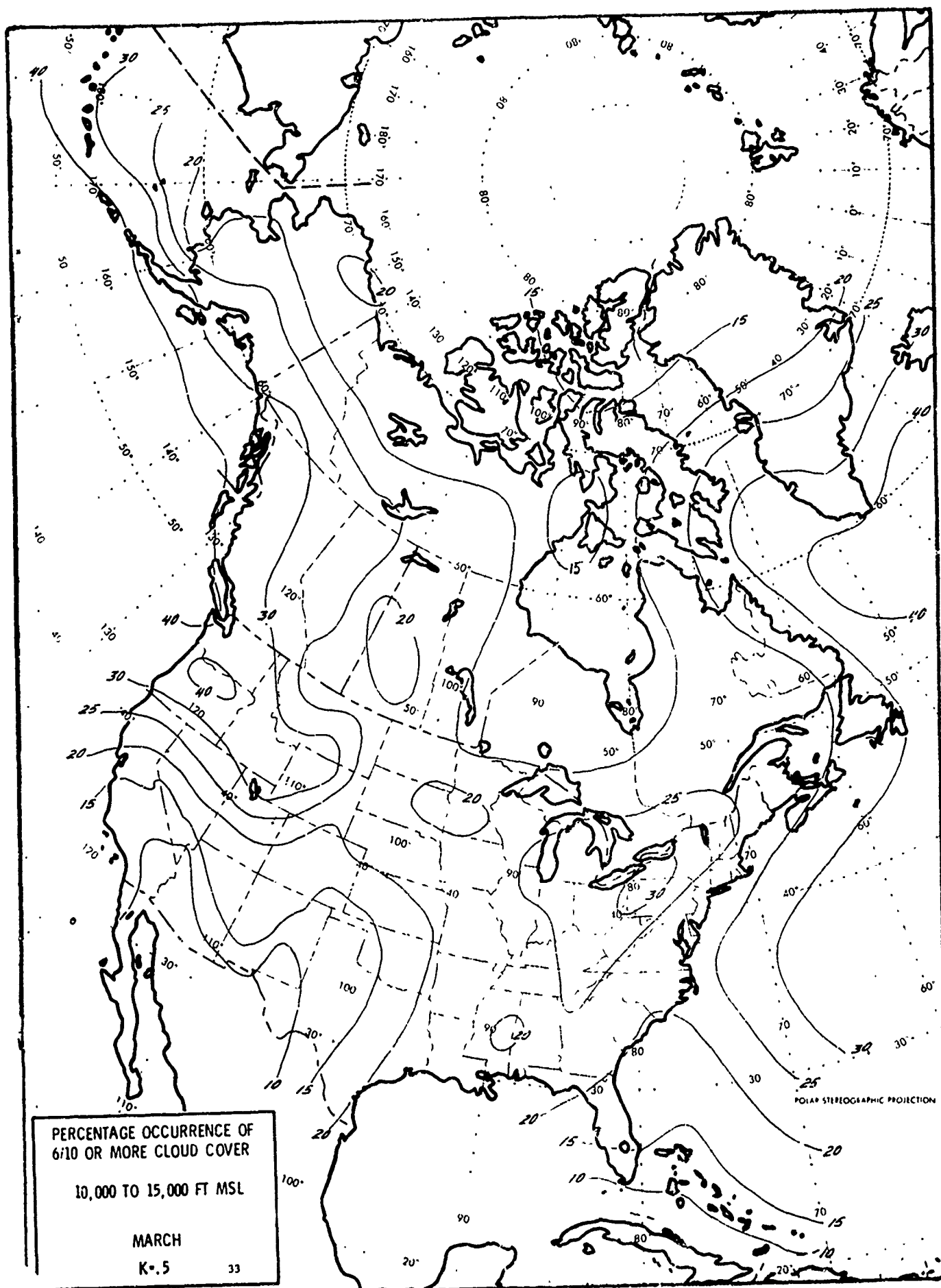


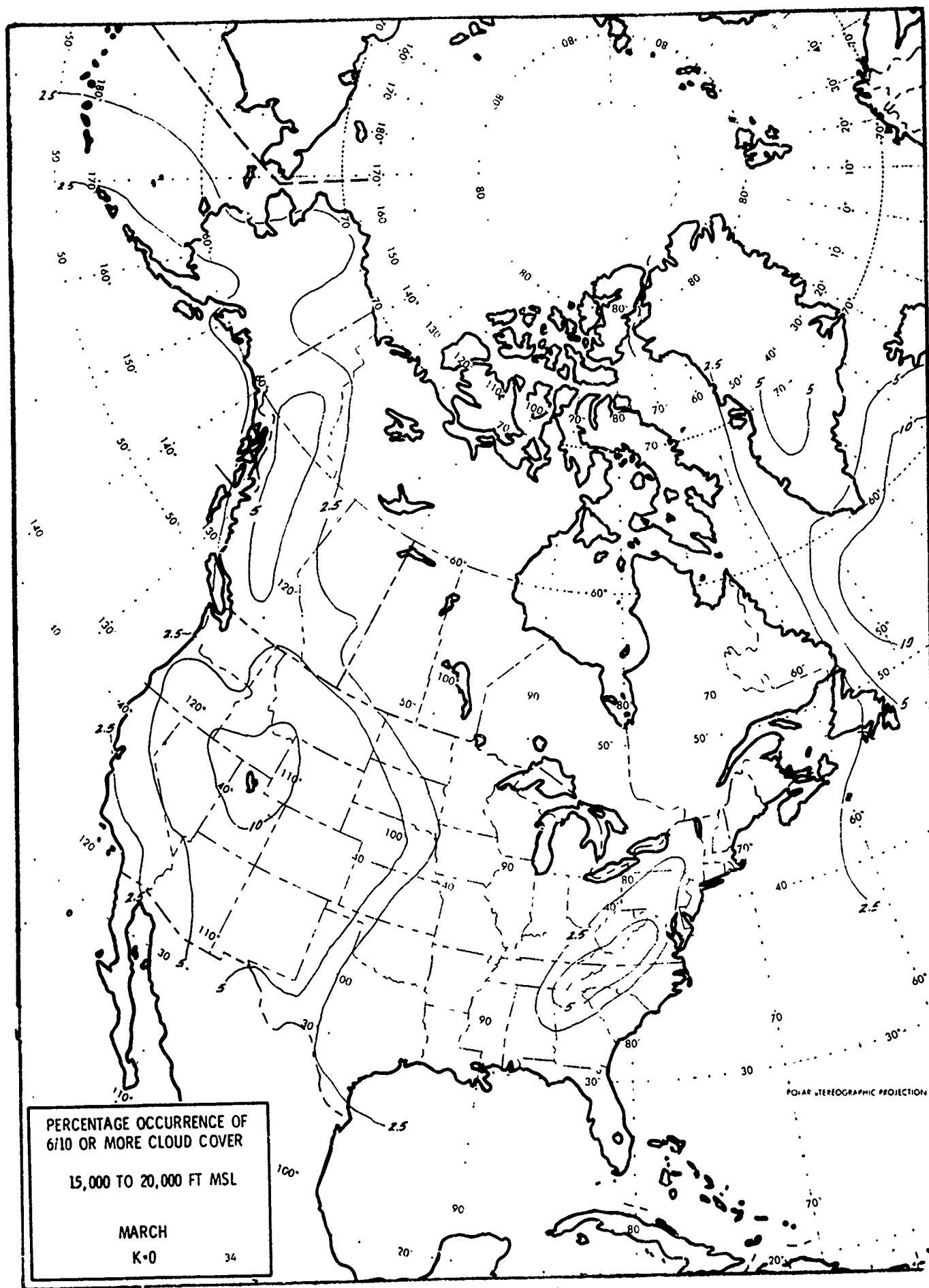


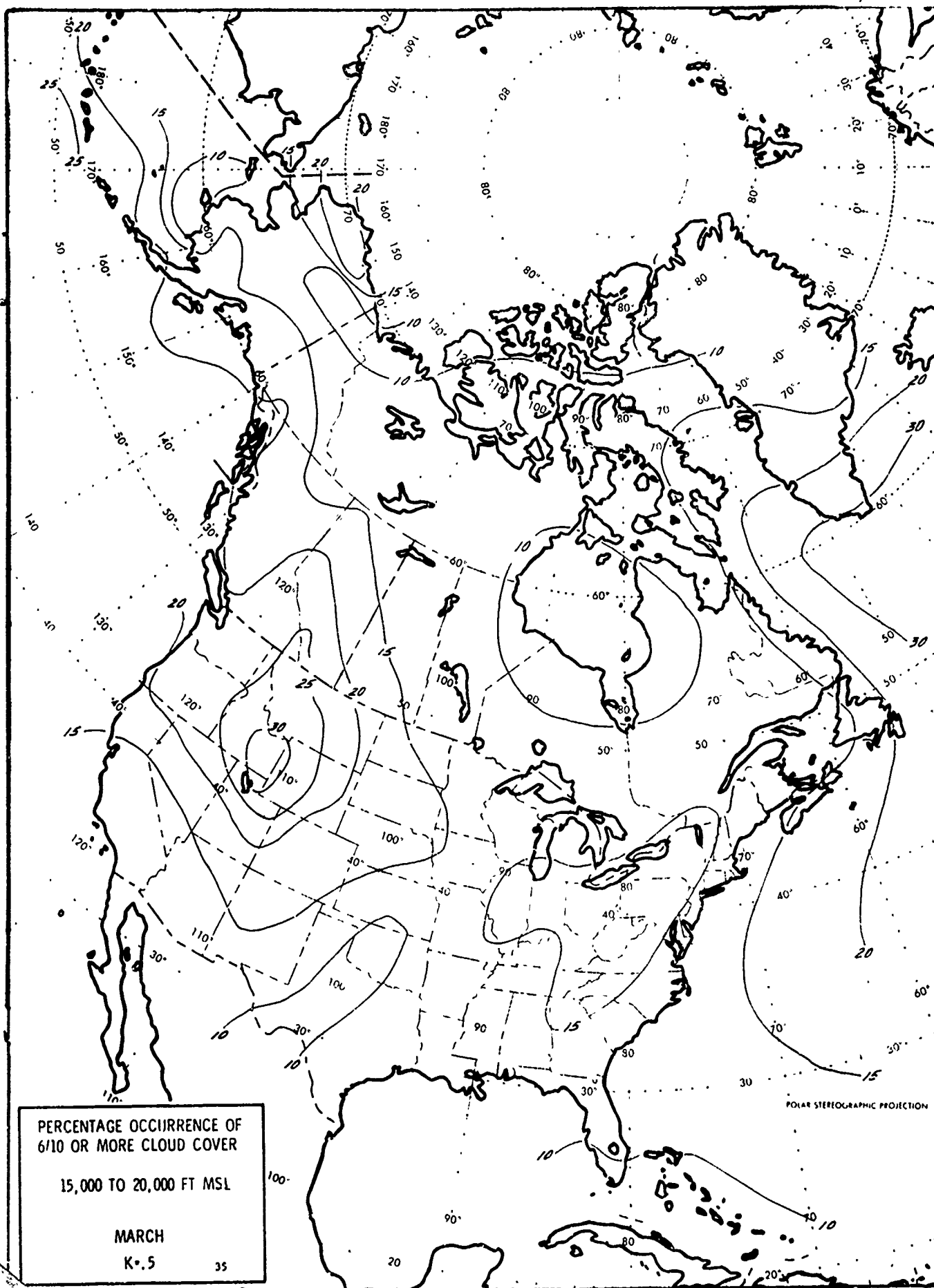


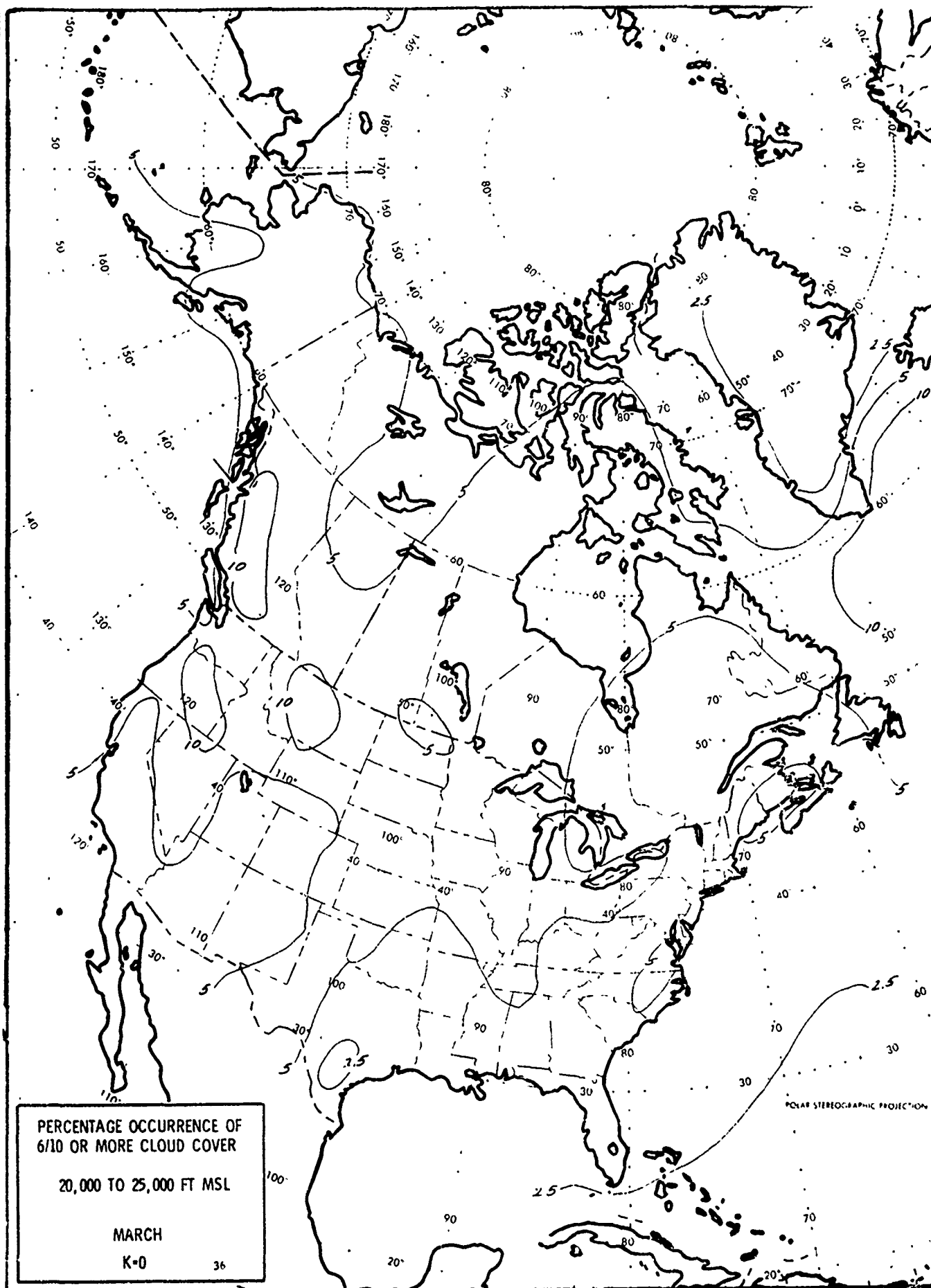












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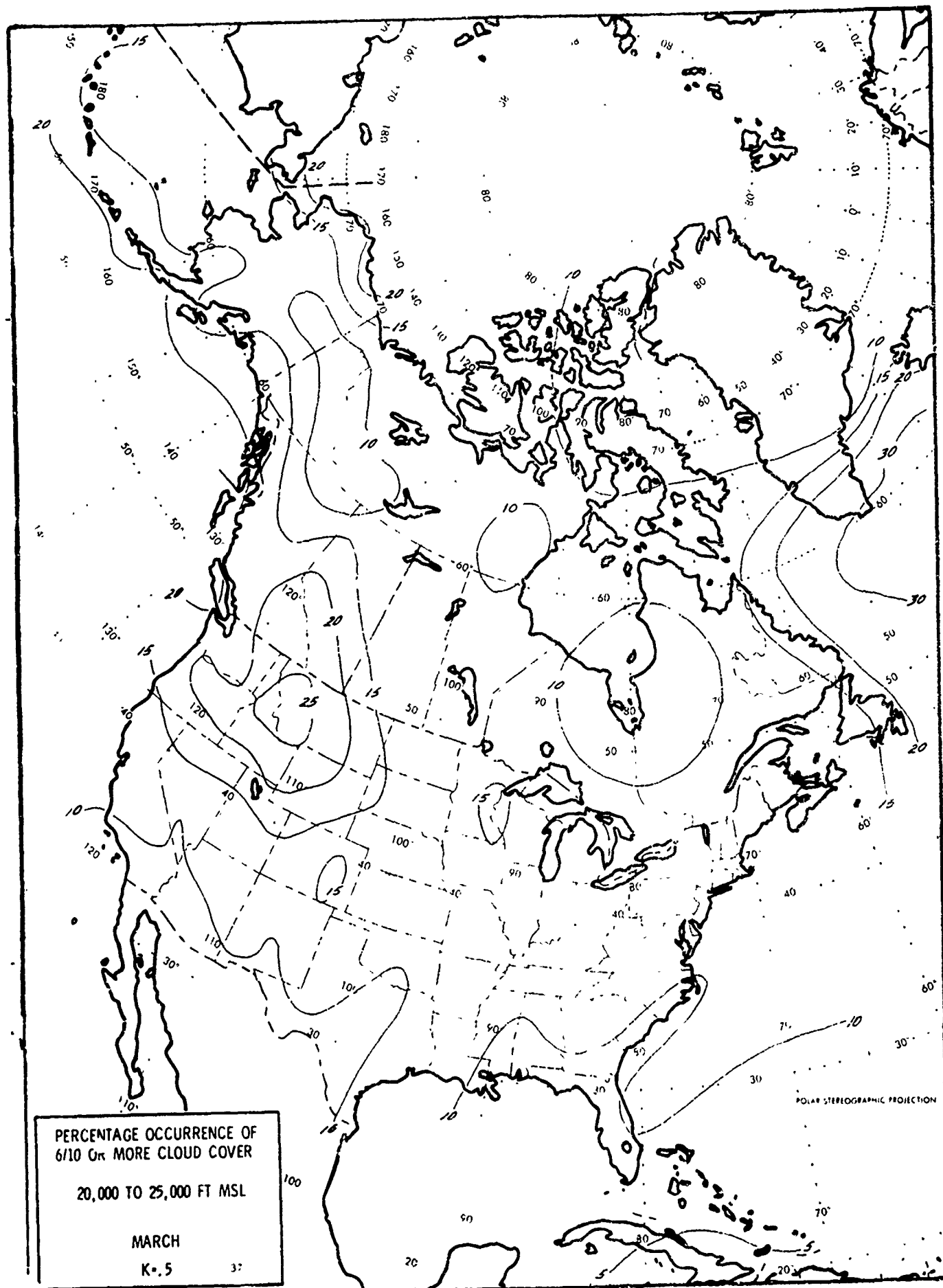
20,000 TO 25,000 FT MSL

MARCH

K=0

36

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

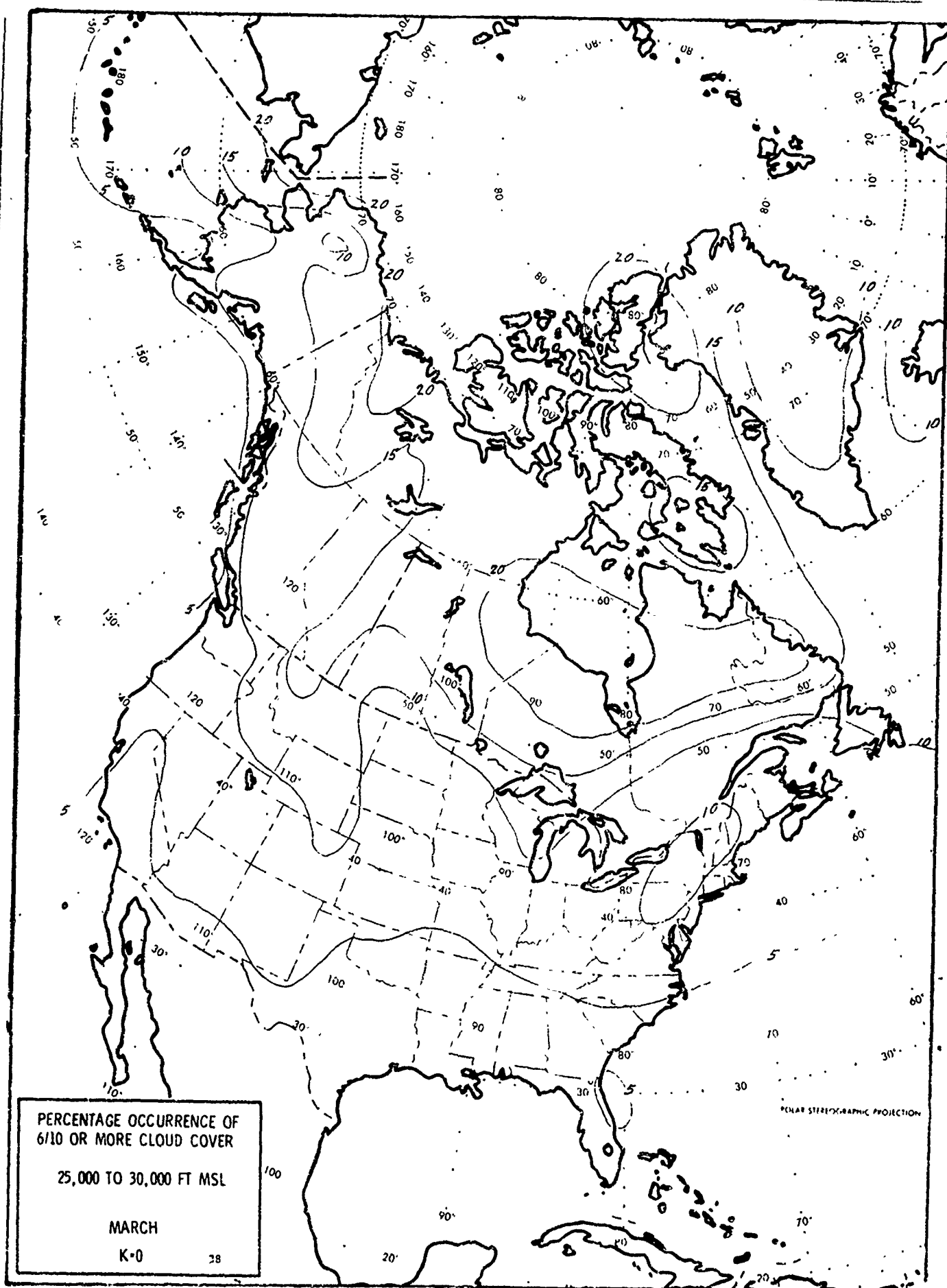
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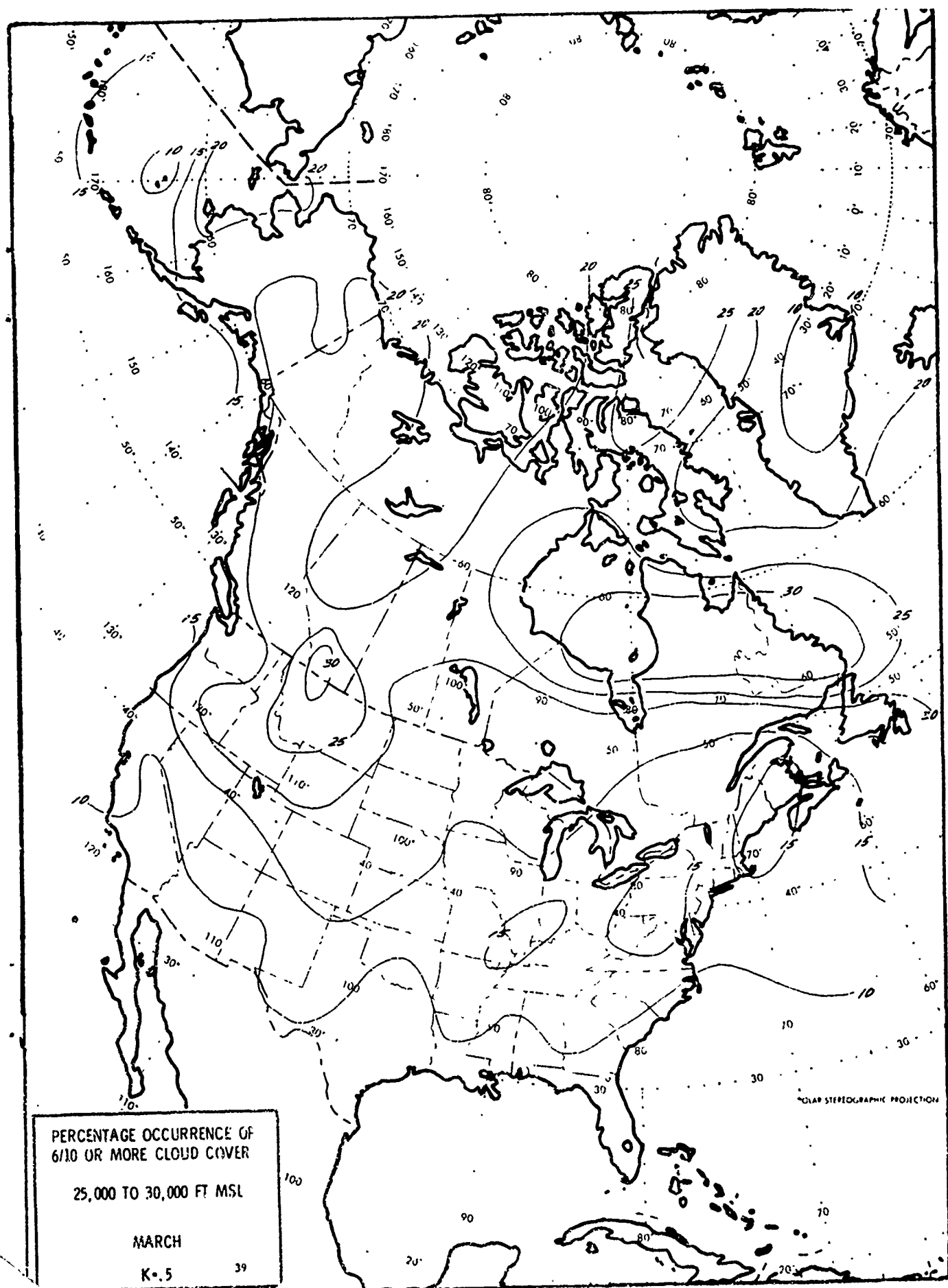
MARCH

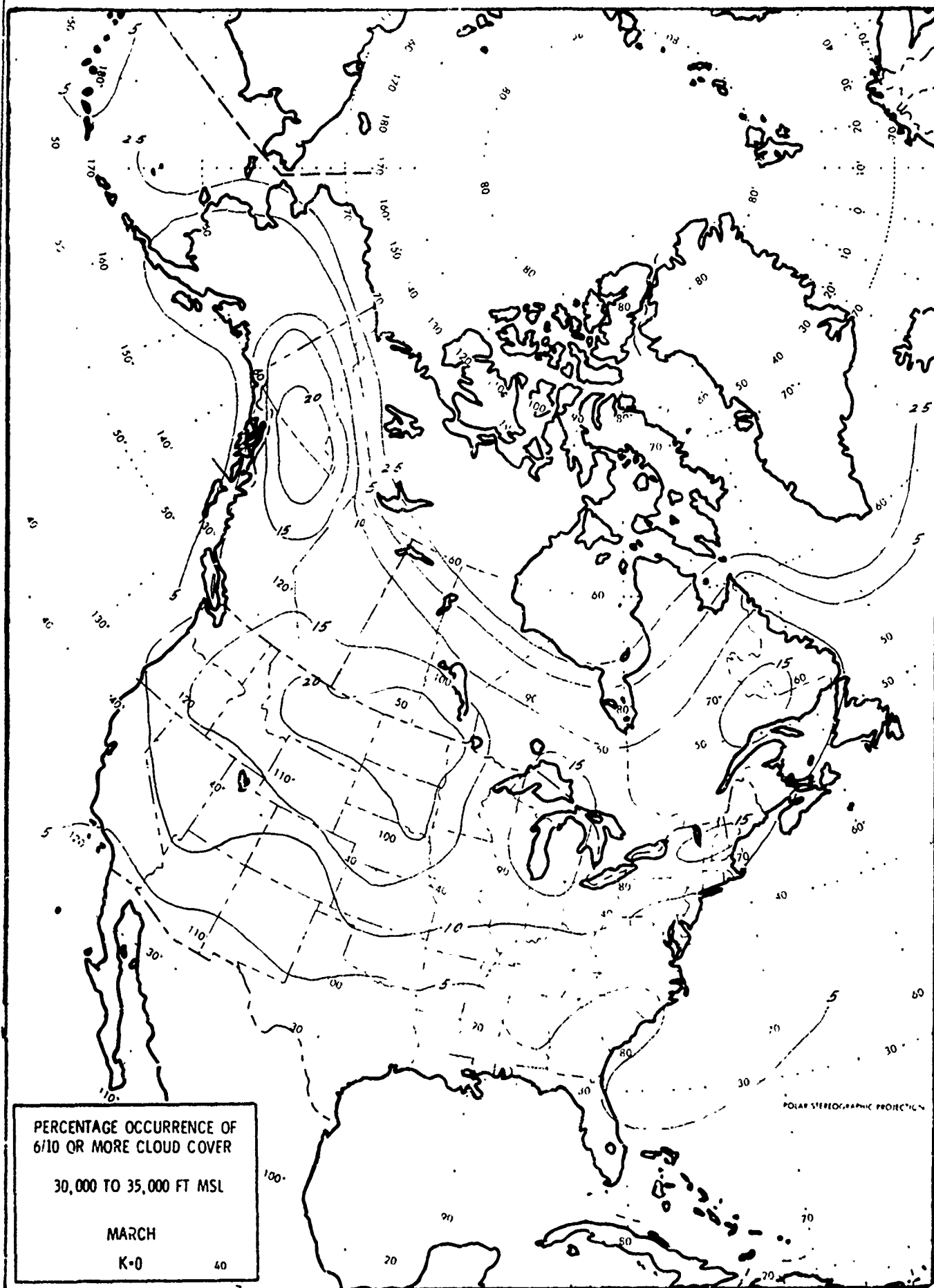
K=5

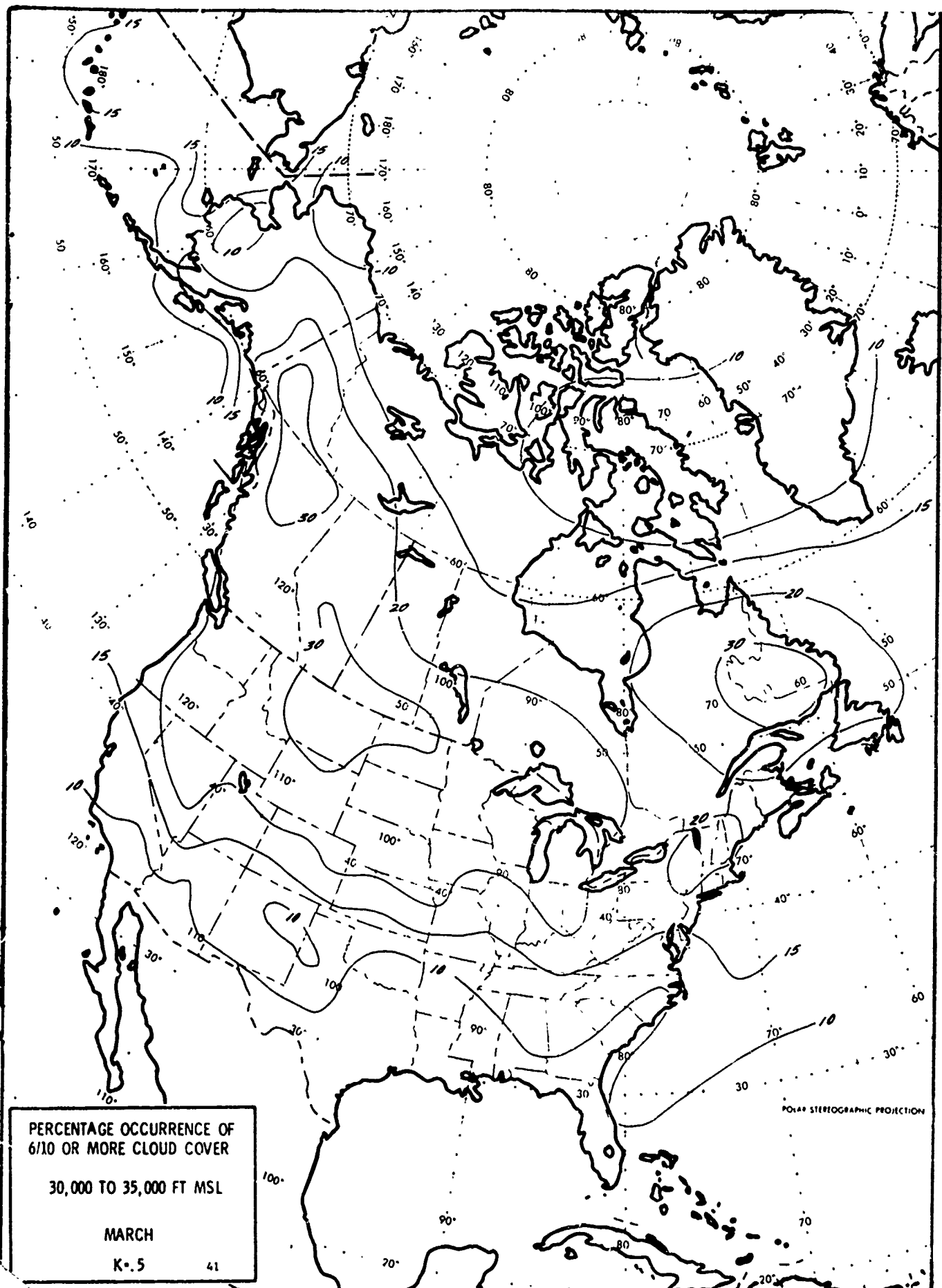
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POLAR STEREOGRAPHIC PROJECTION









PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

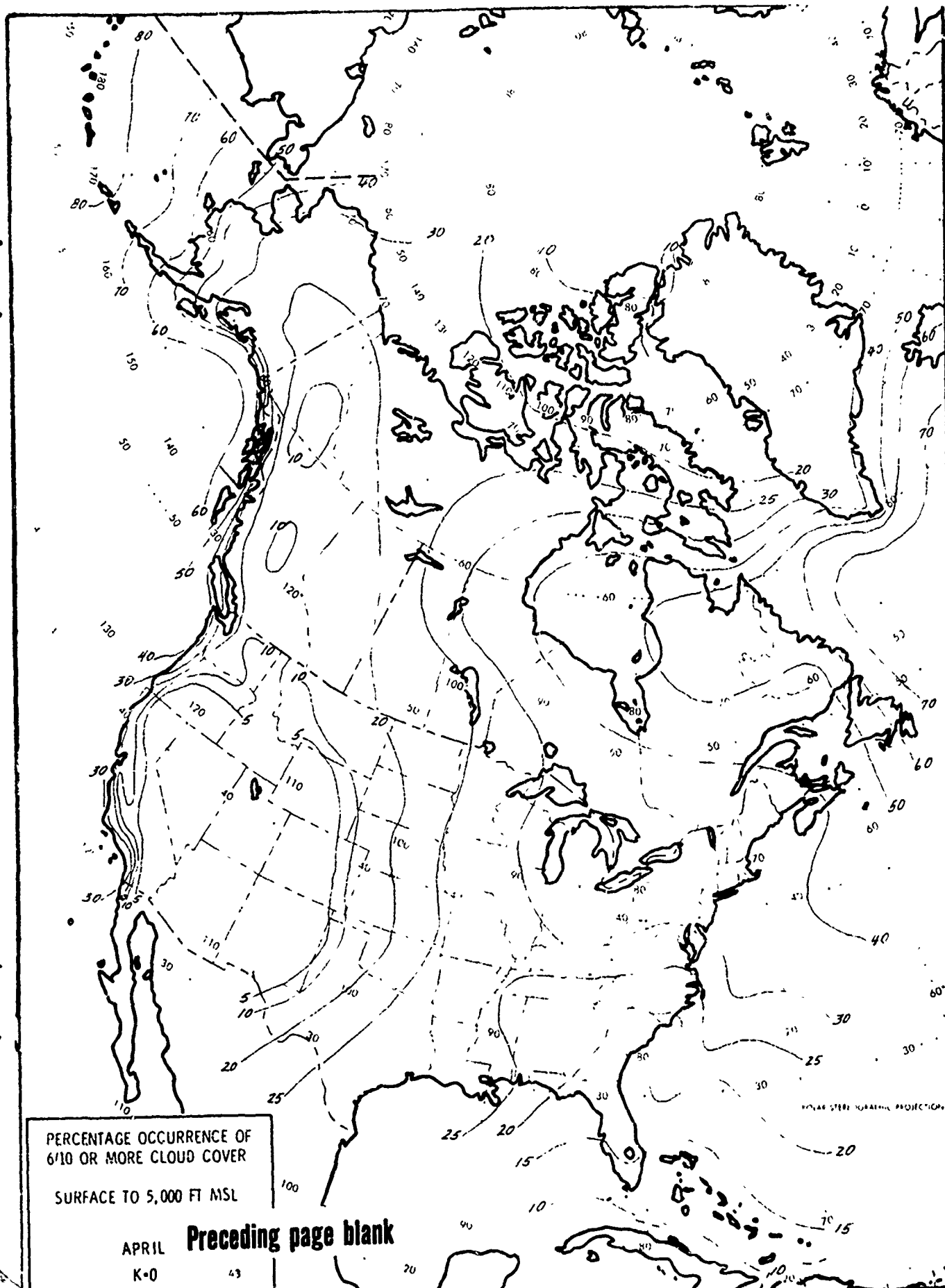
30,000 TO 35,000 FT MSL

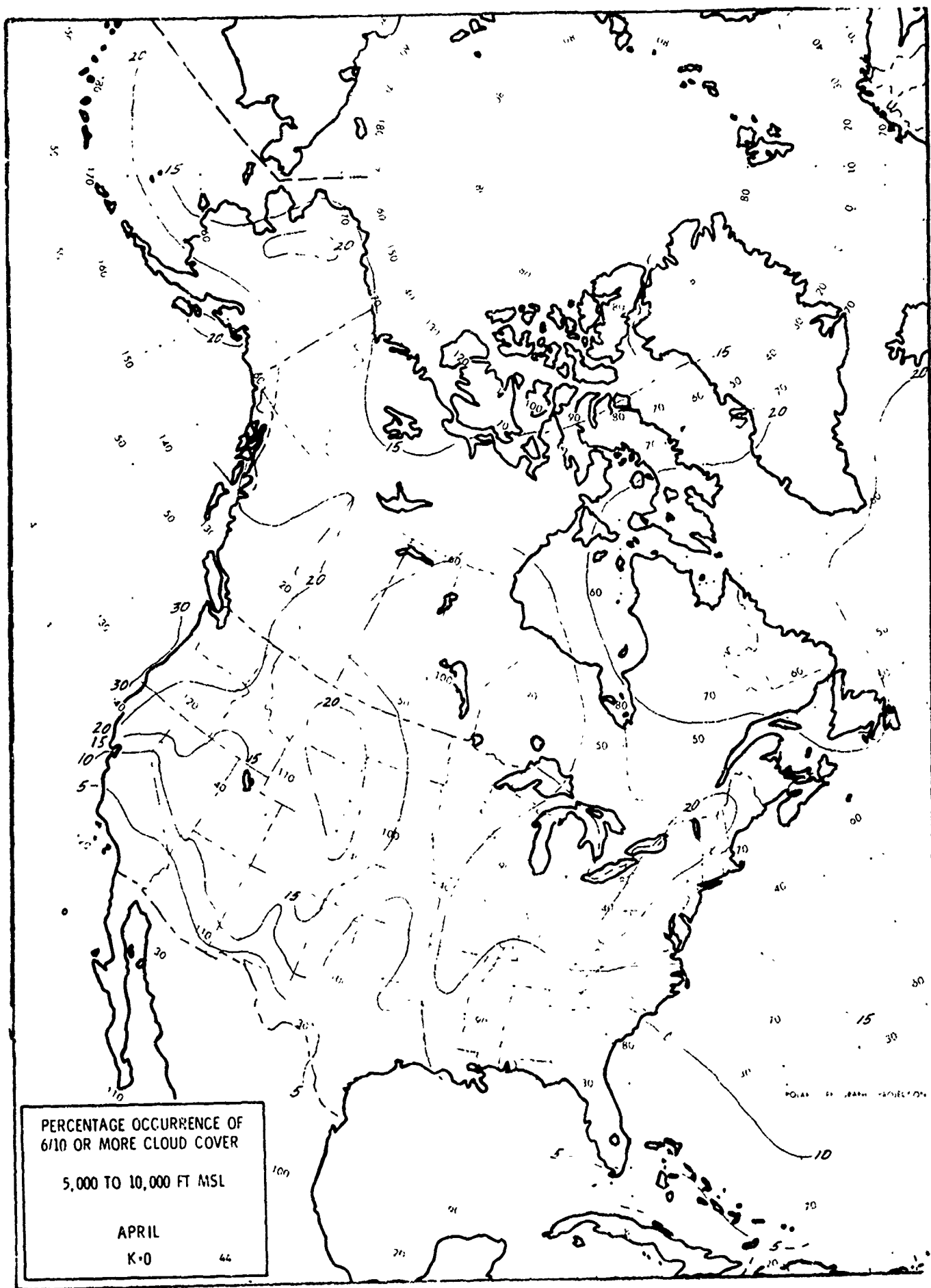
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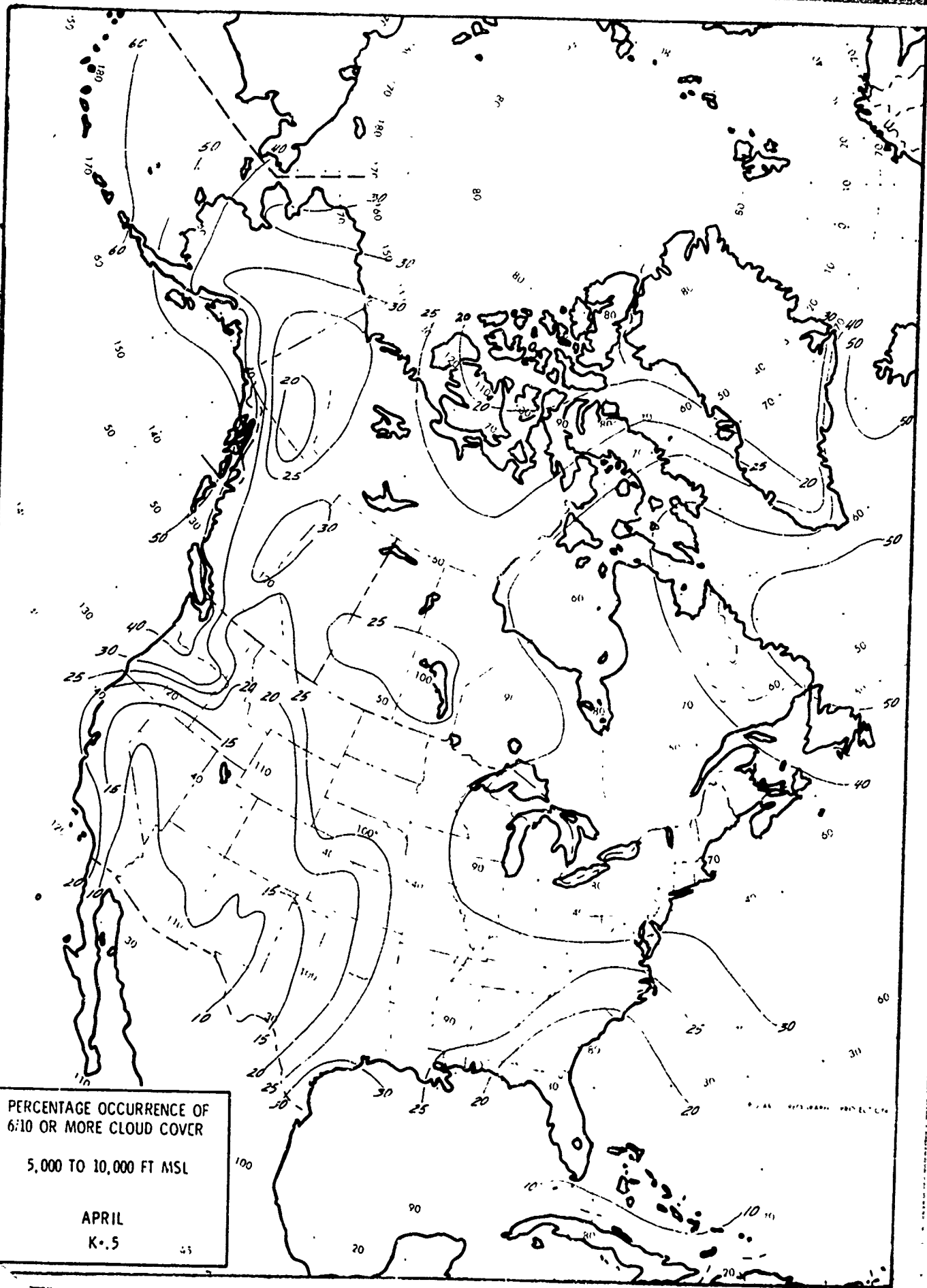
K-5

41

POLAR STEREOGRAPHIC PROJECTION







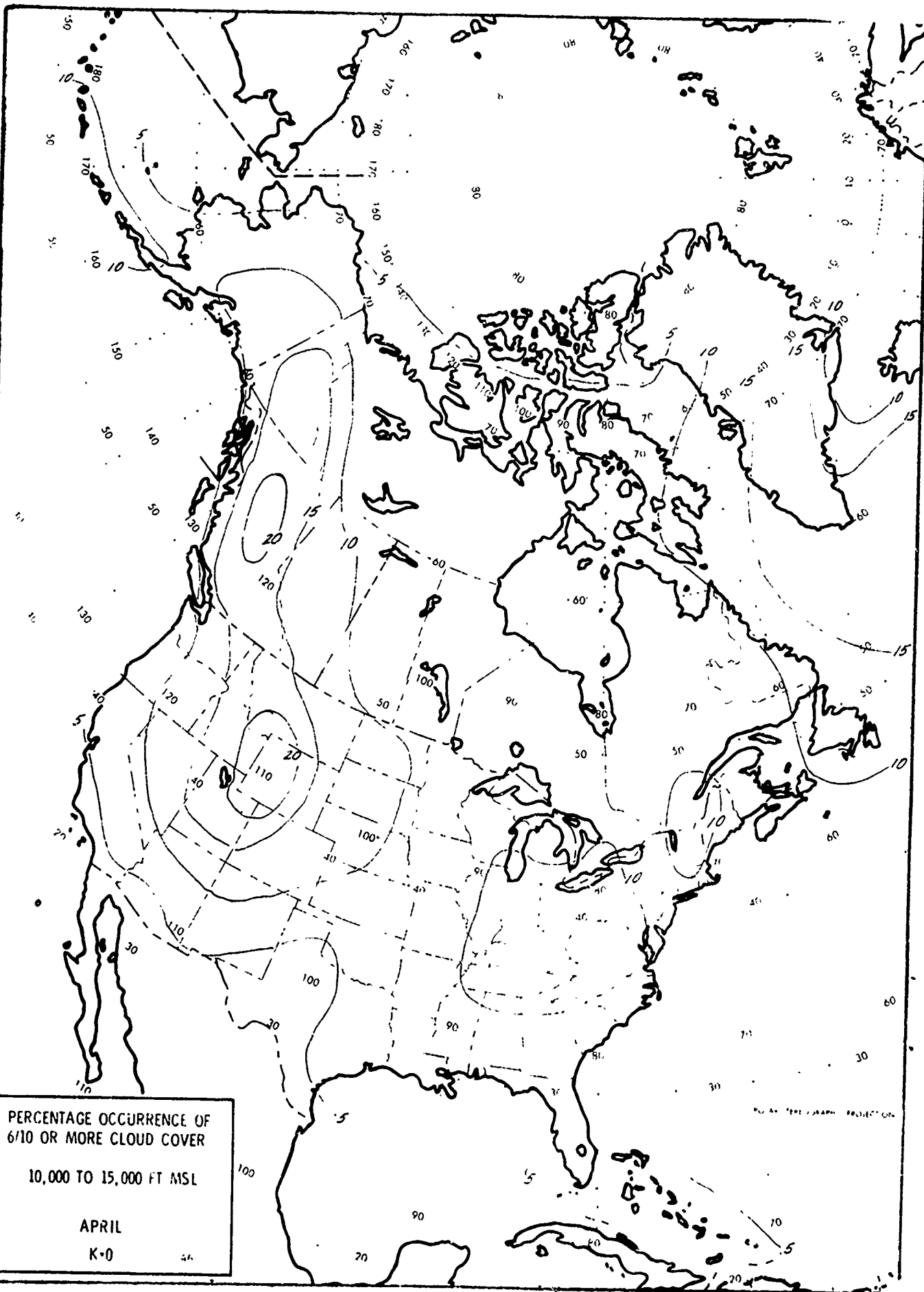
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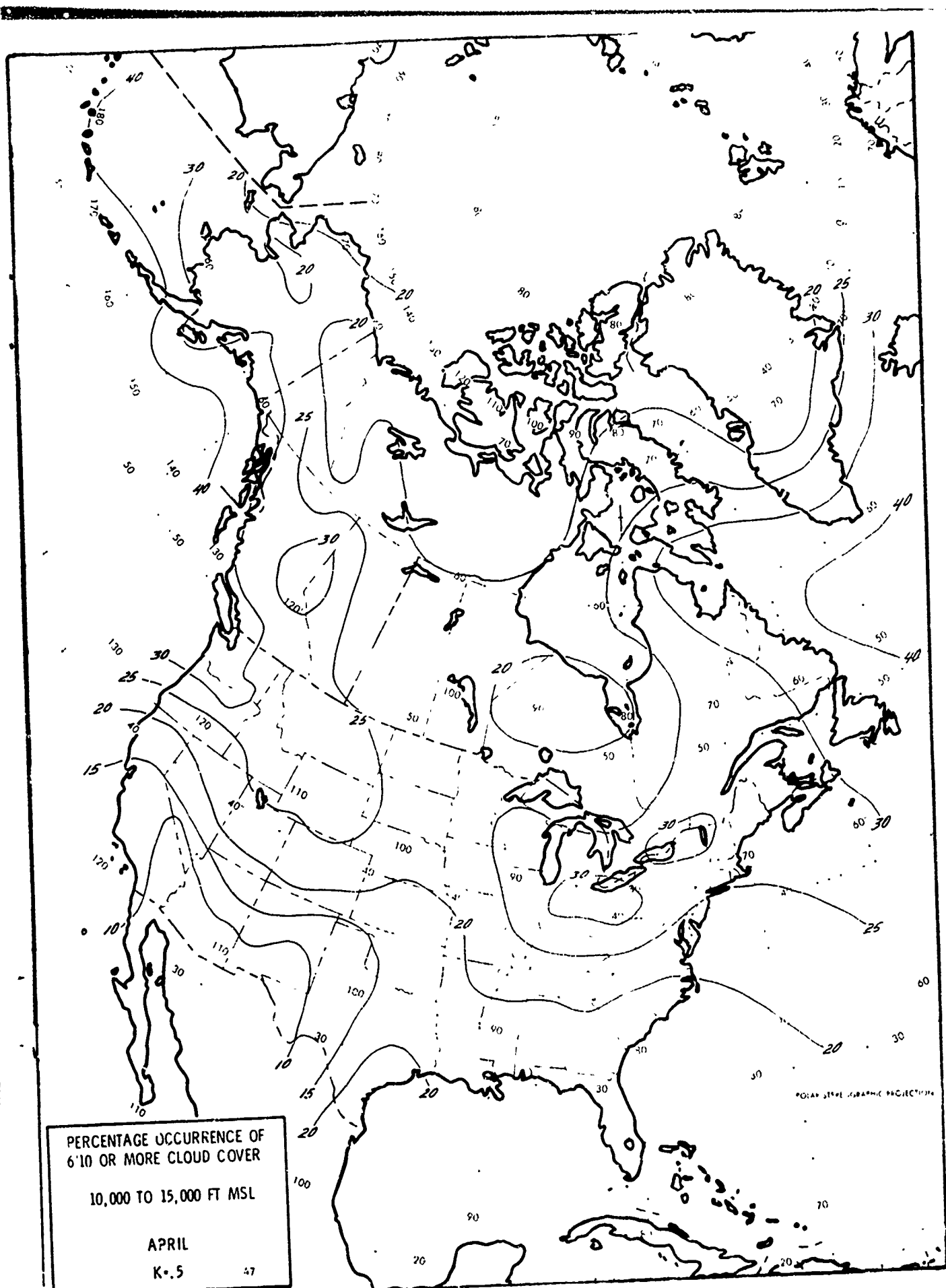
10,000 TO 15,000 FT MSL

APRIL

K-0

46





PERCENTAGE OCCURRENCE OF
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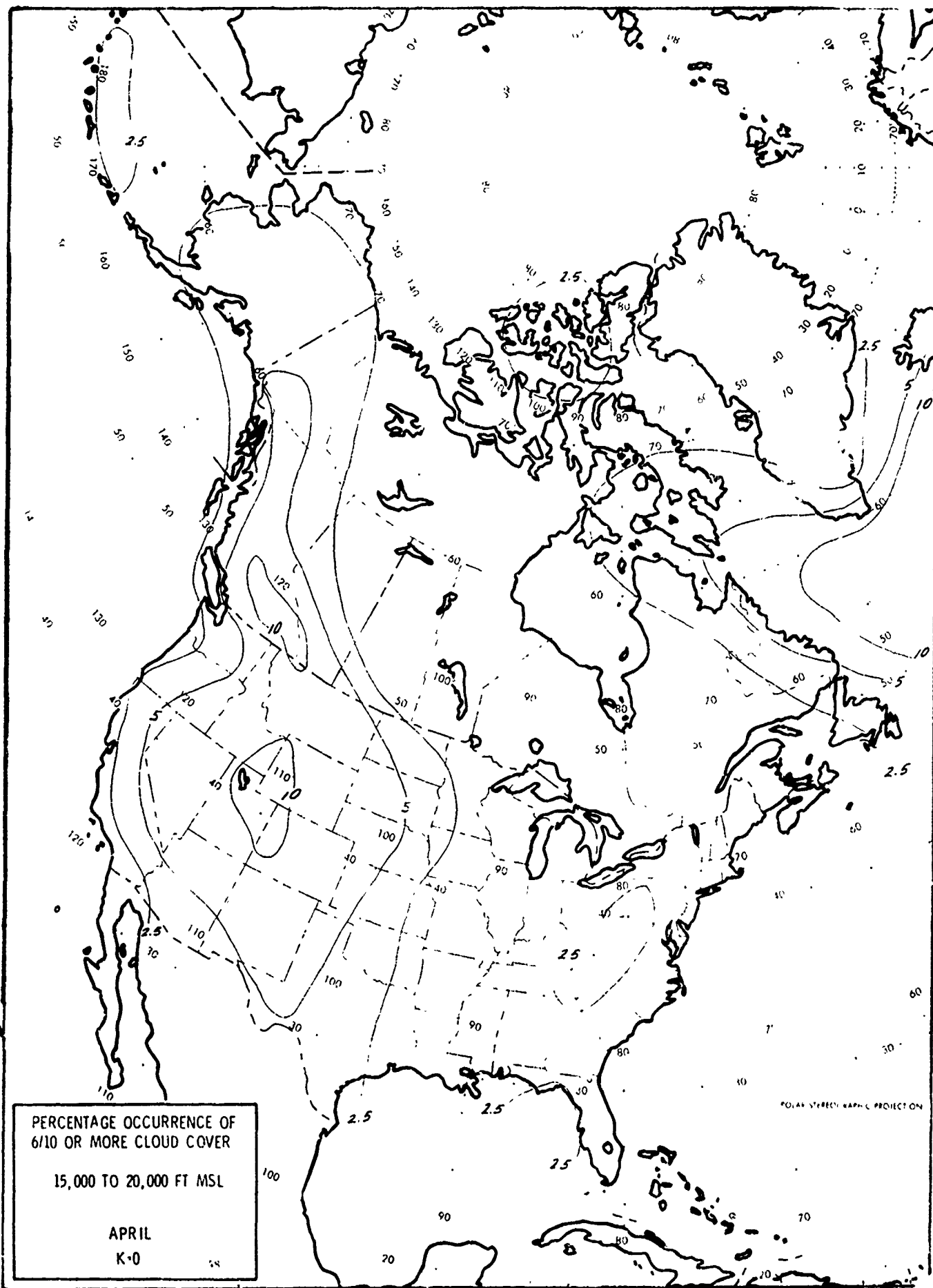
10,000 TO 15,000 FT MSL

APRIL

K-5

47

POLAR STEREO CYLINDRICAL PROJECTION

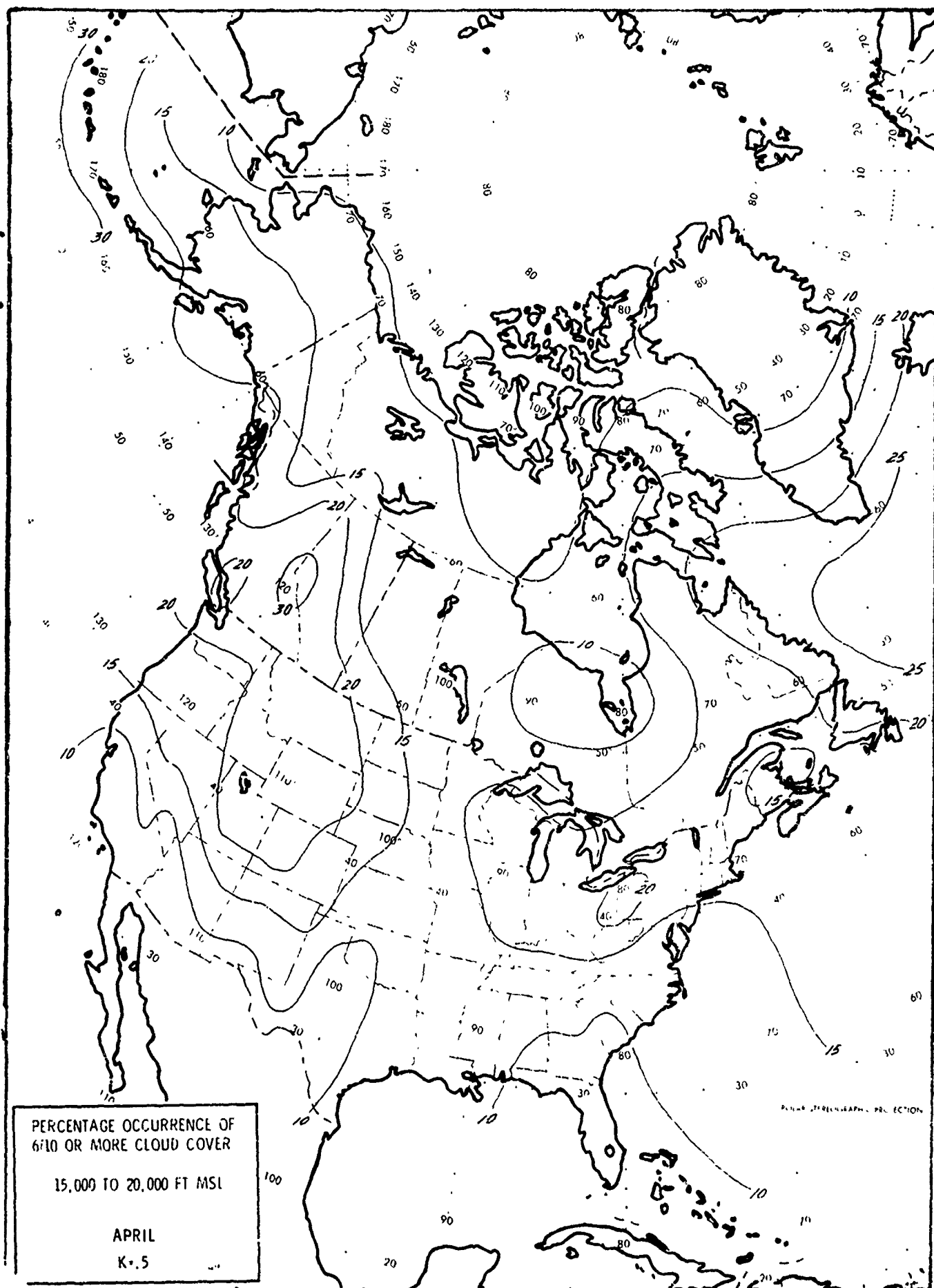


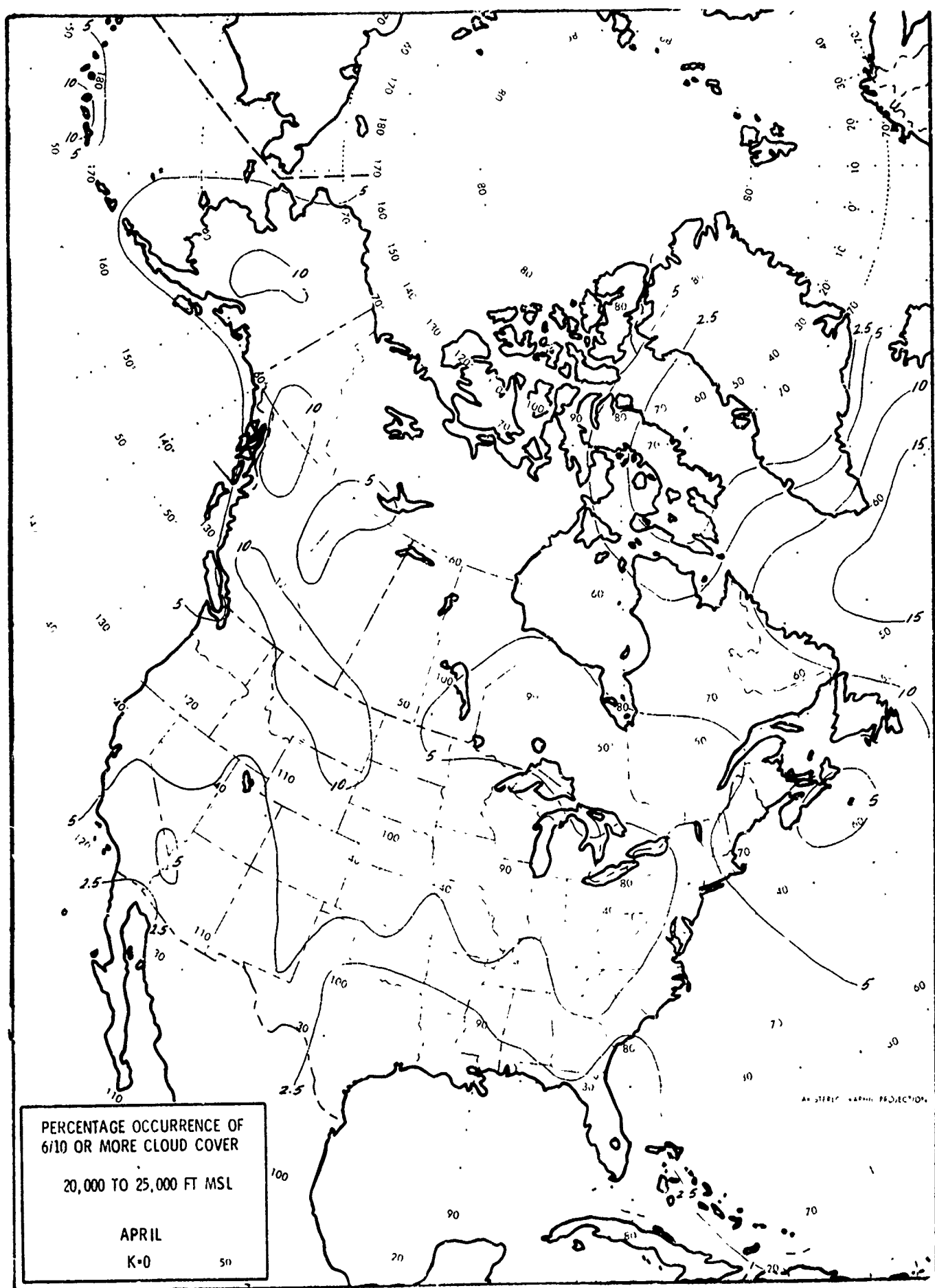
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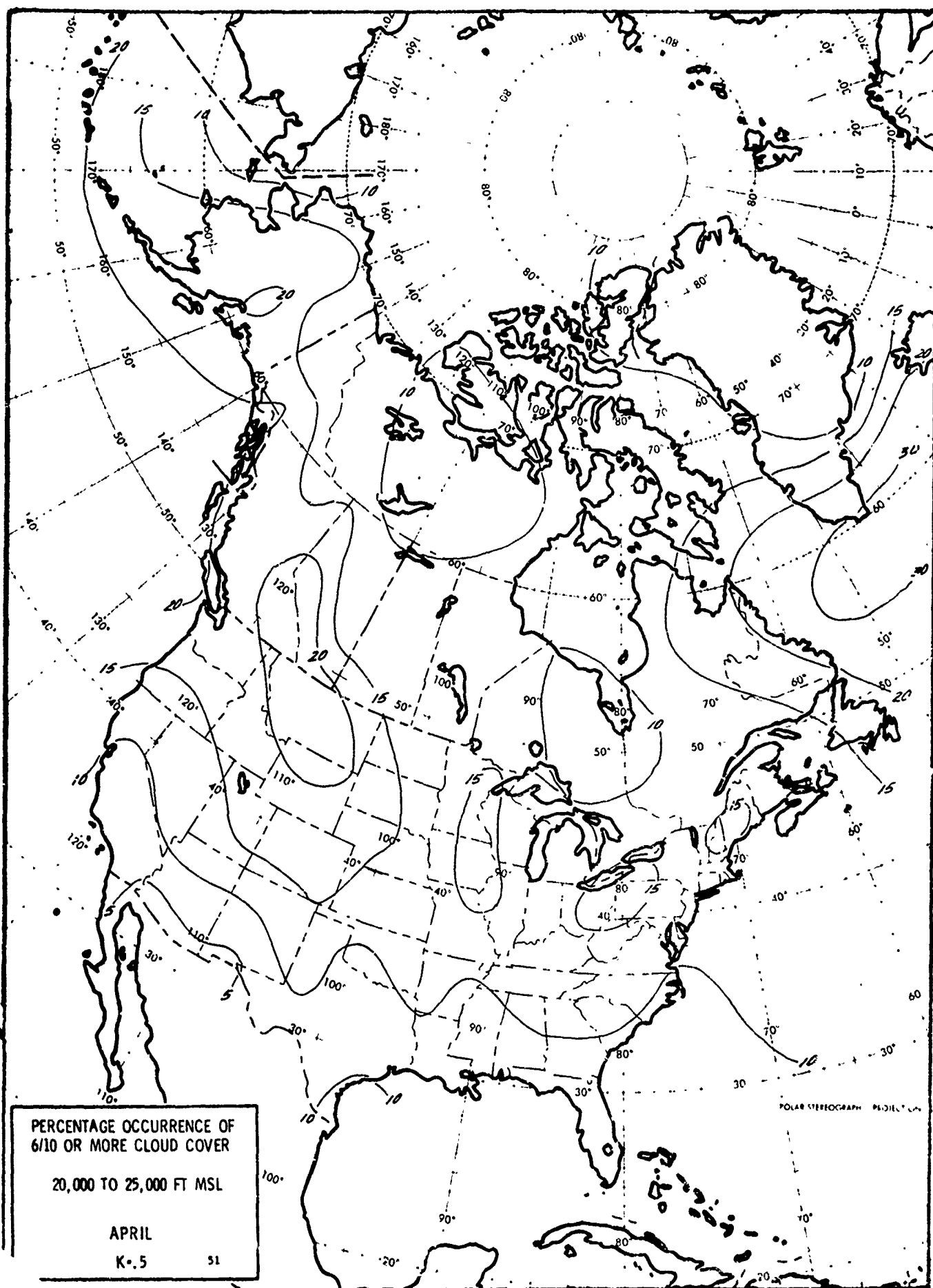
15,000 TO 20,000 FT MSL

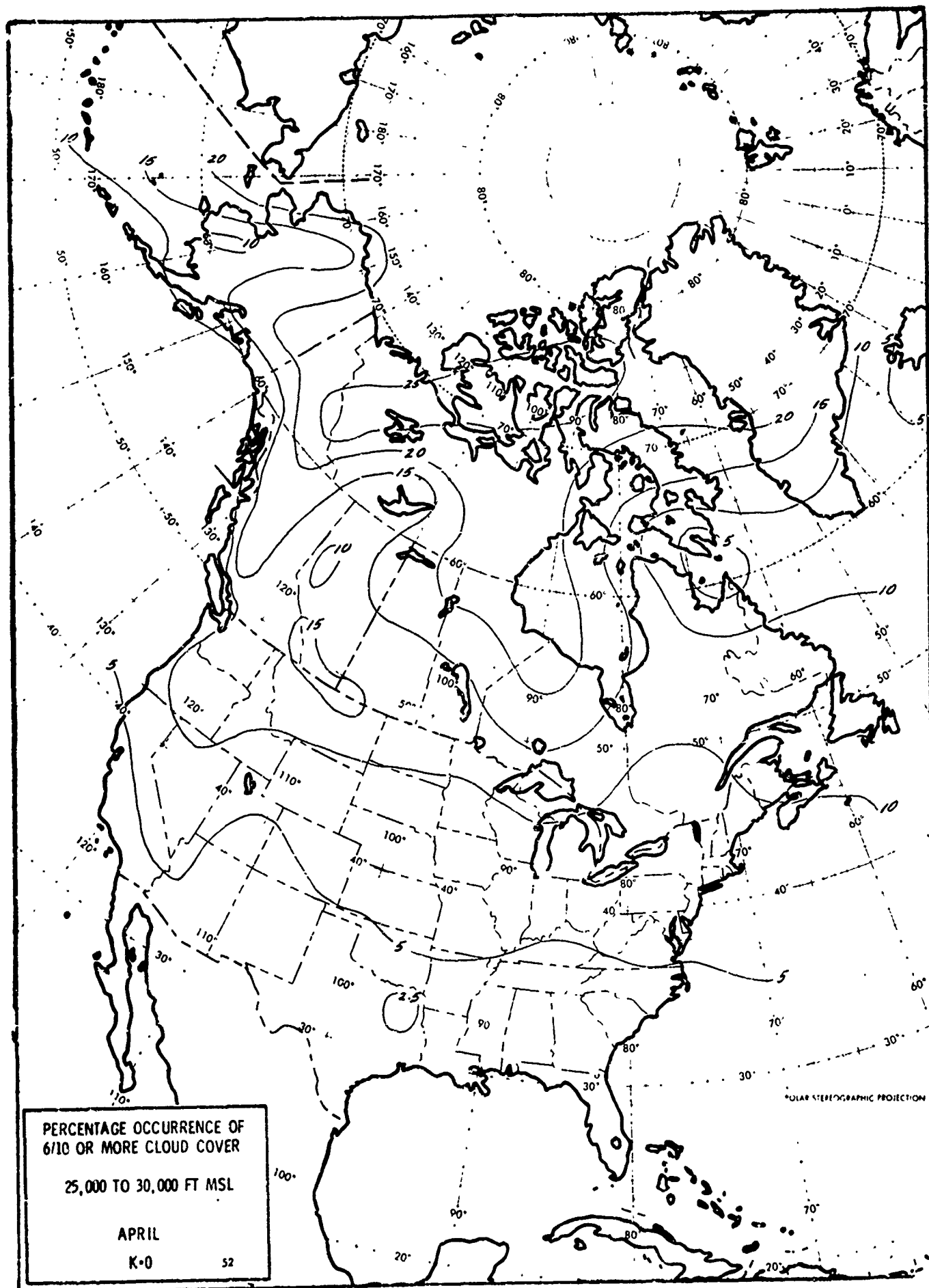
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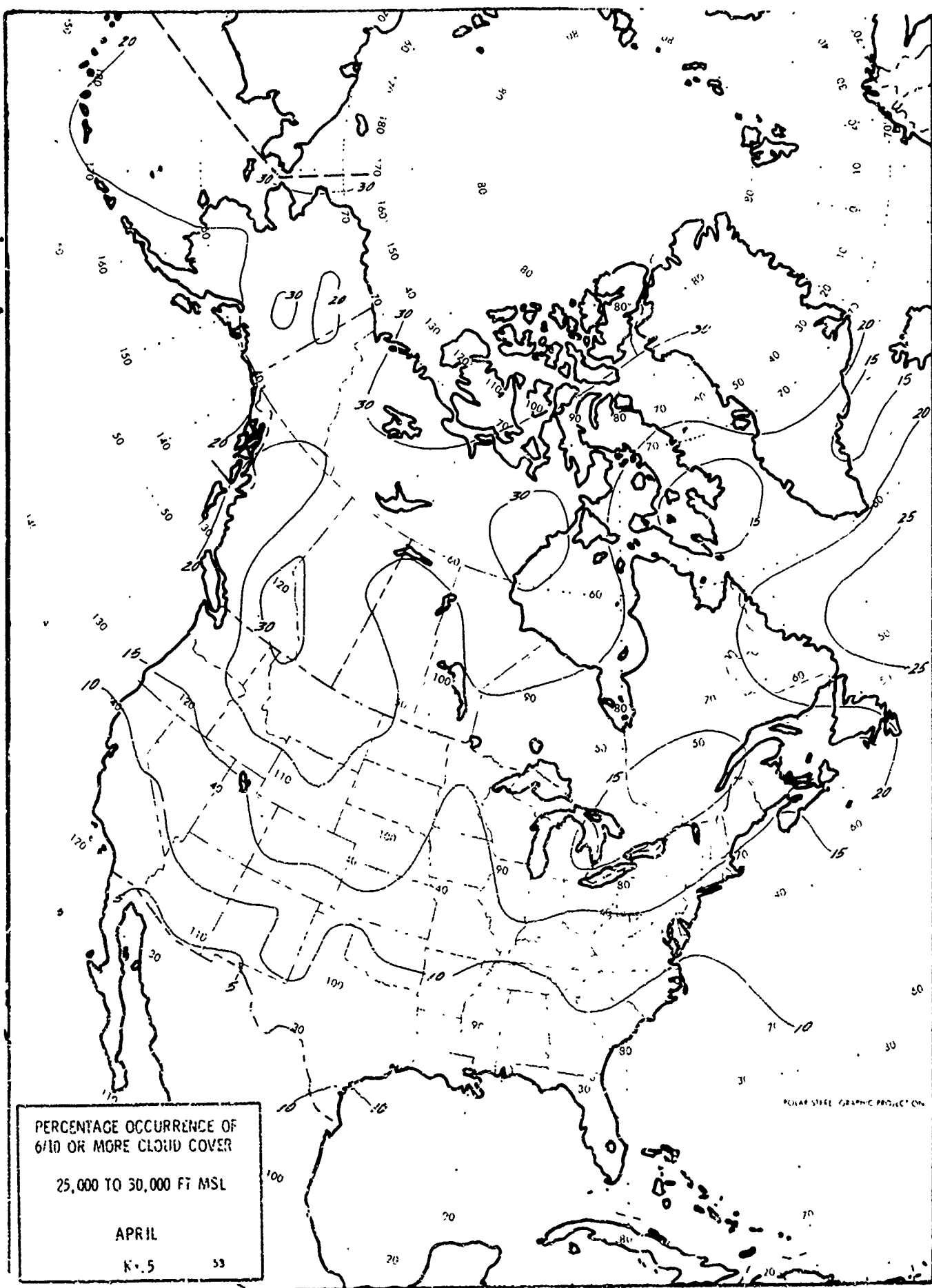
K-0











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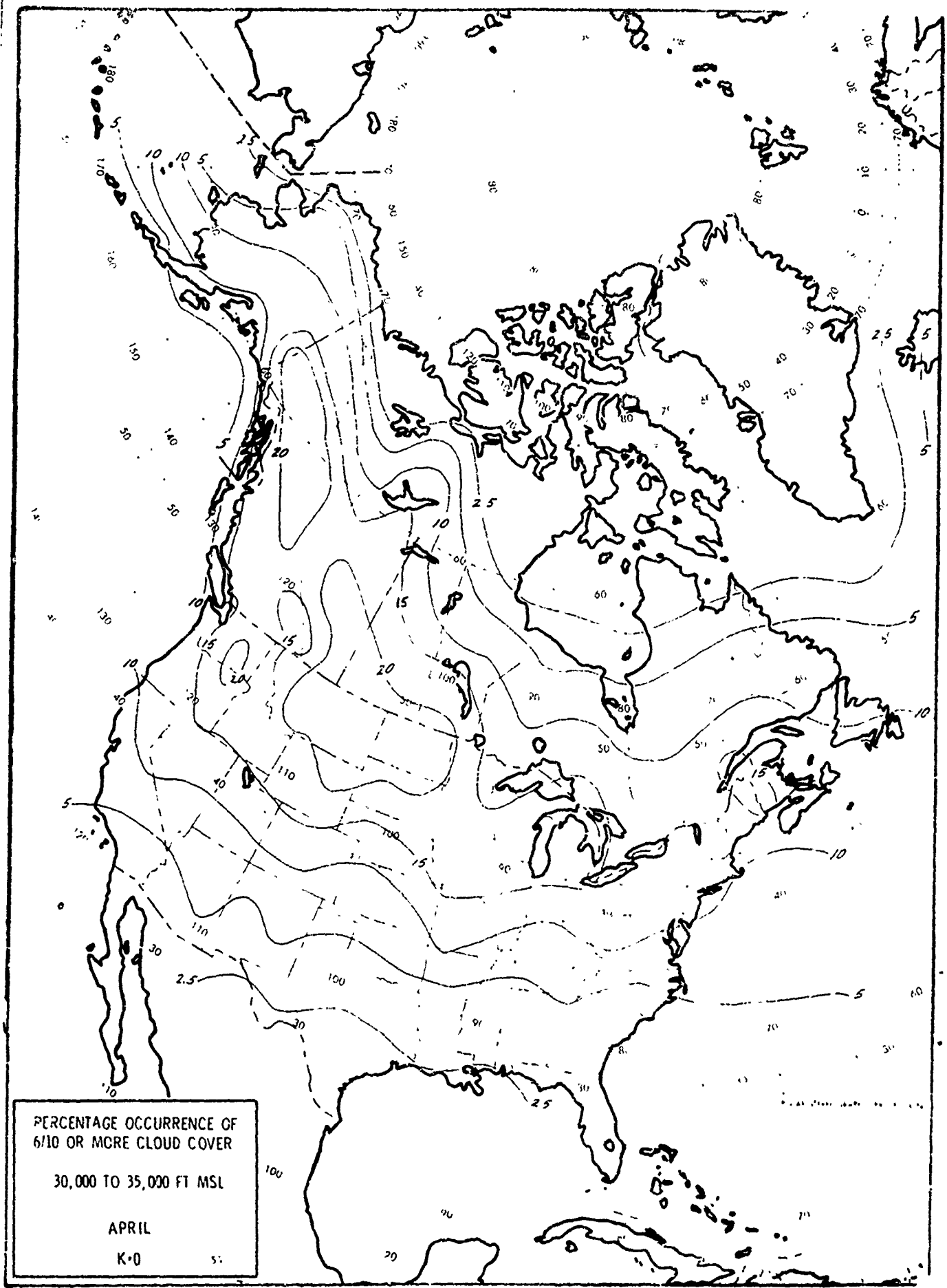
25,000 TO 30,000 FT MSL

APRIL

K-5

33

POLAR STEEL GRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

30,000 TO 35,000 FT MSL

APRIL

K-0

5:

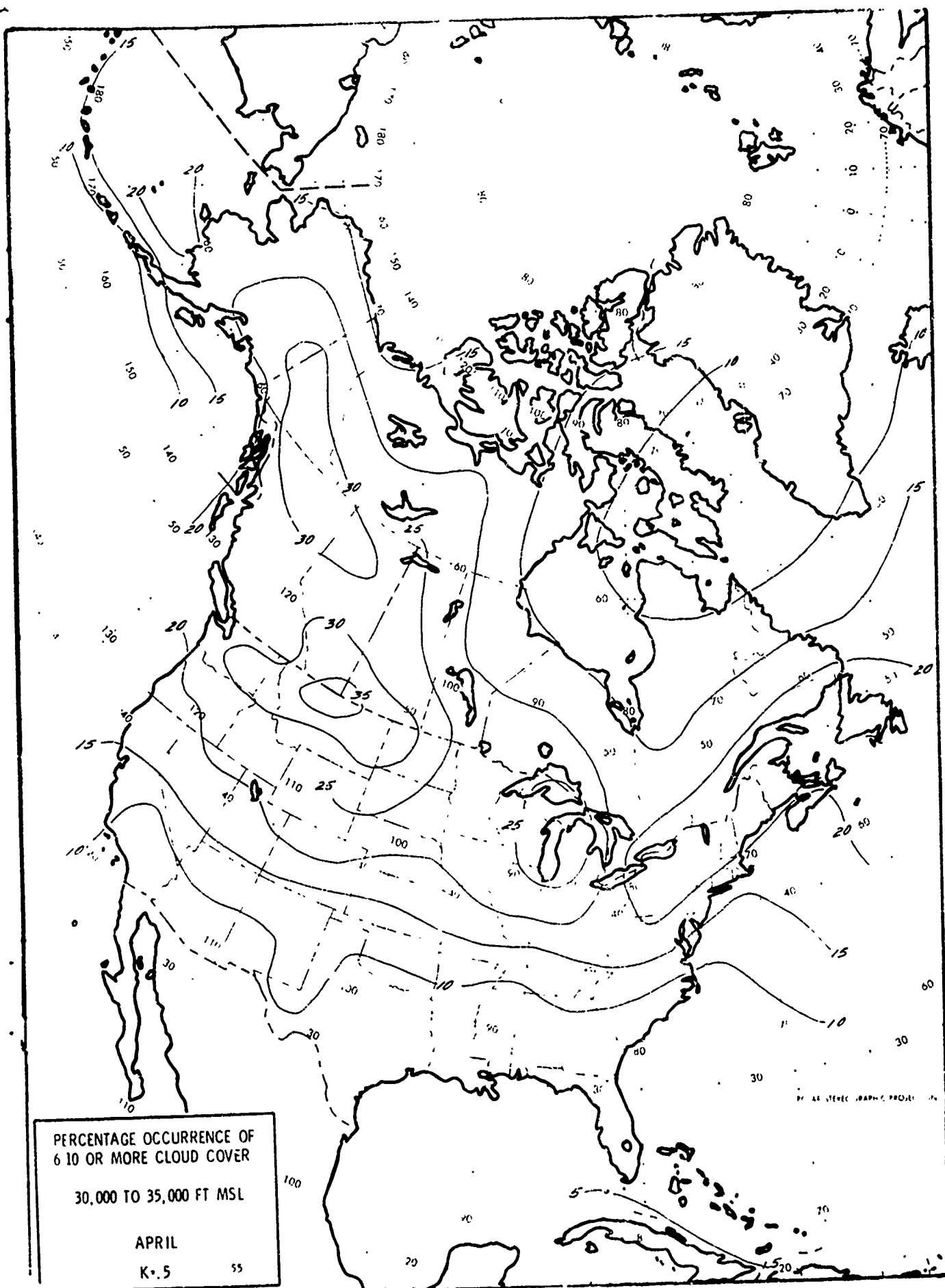
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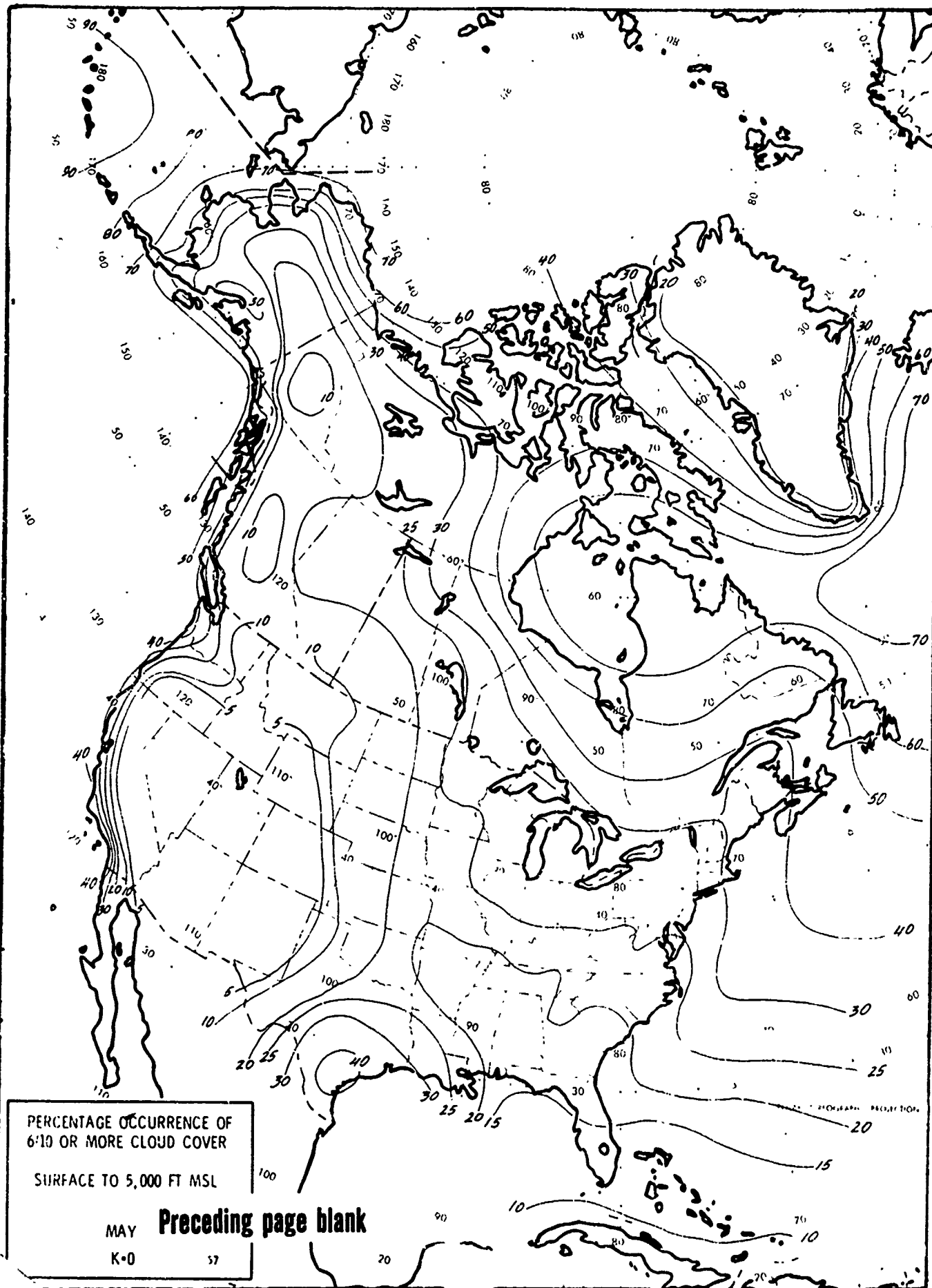
30,000 TO 35,000 FT MSL

APRIL

K-5

55





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

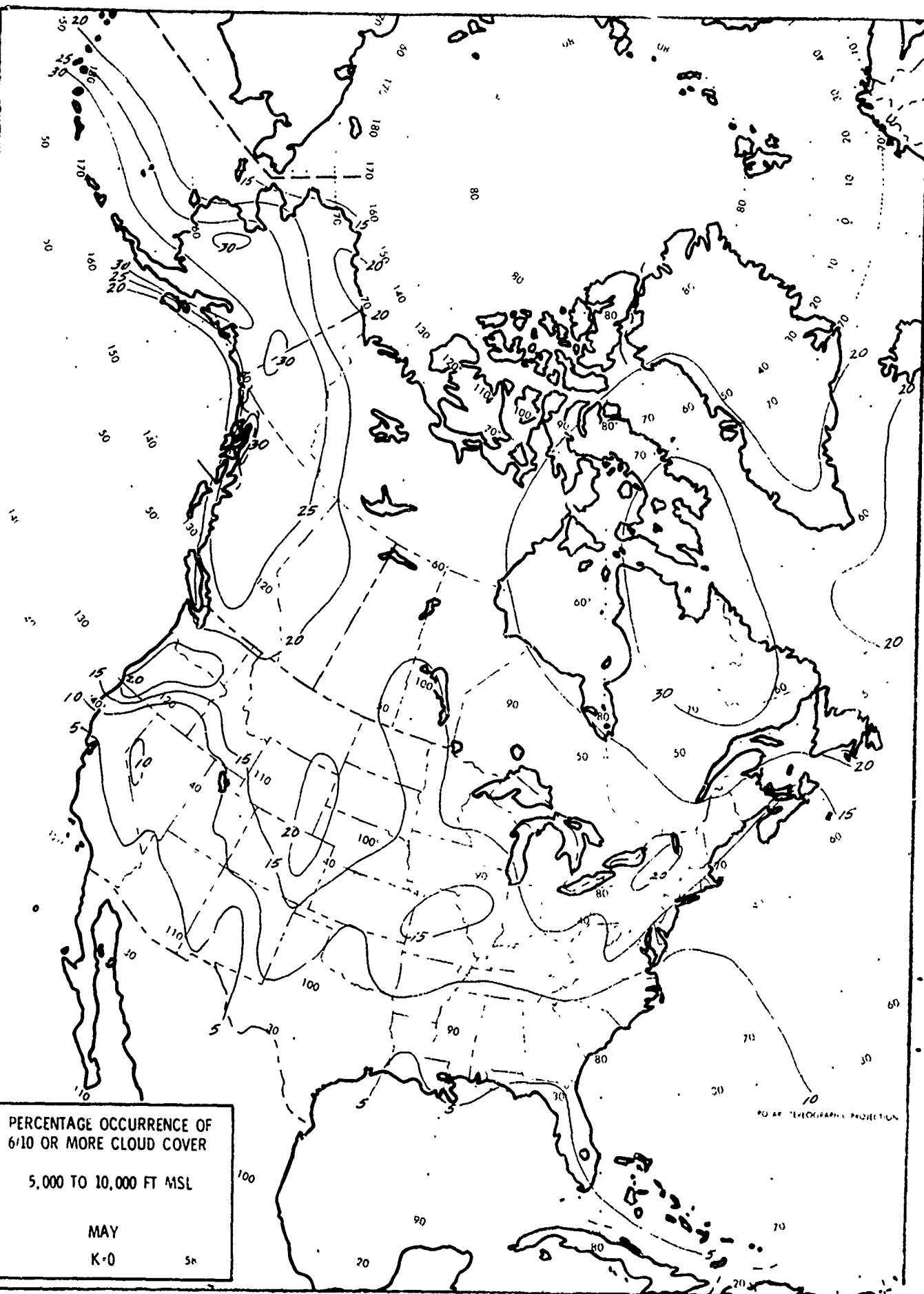
5,000 TO 10,000 FT MSL

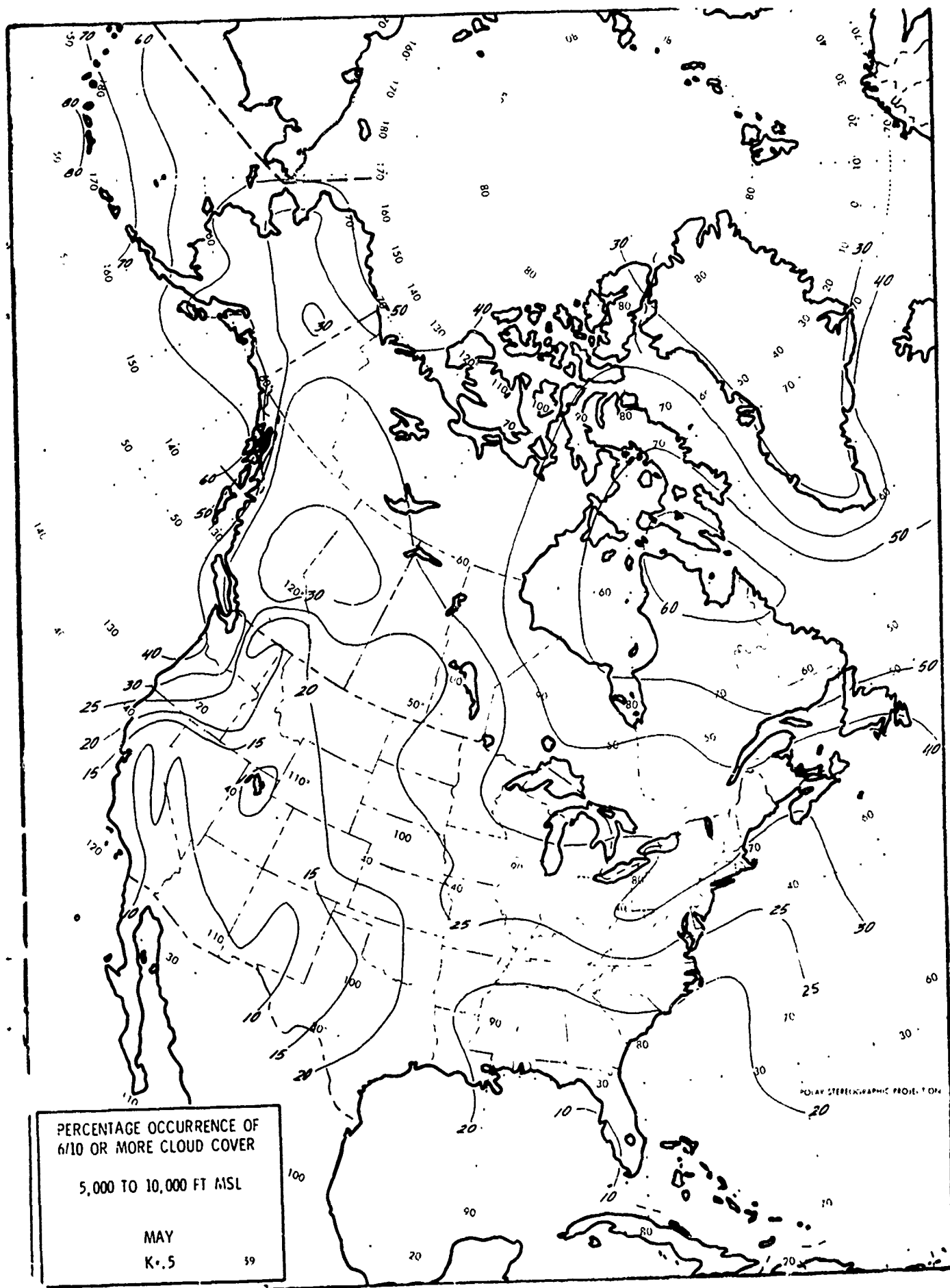
MAY

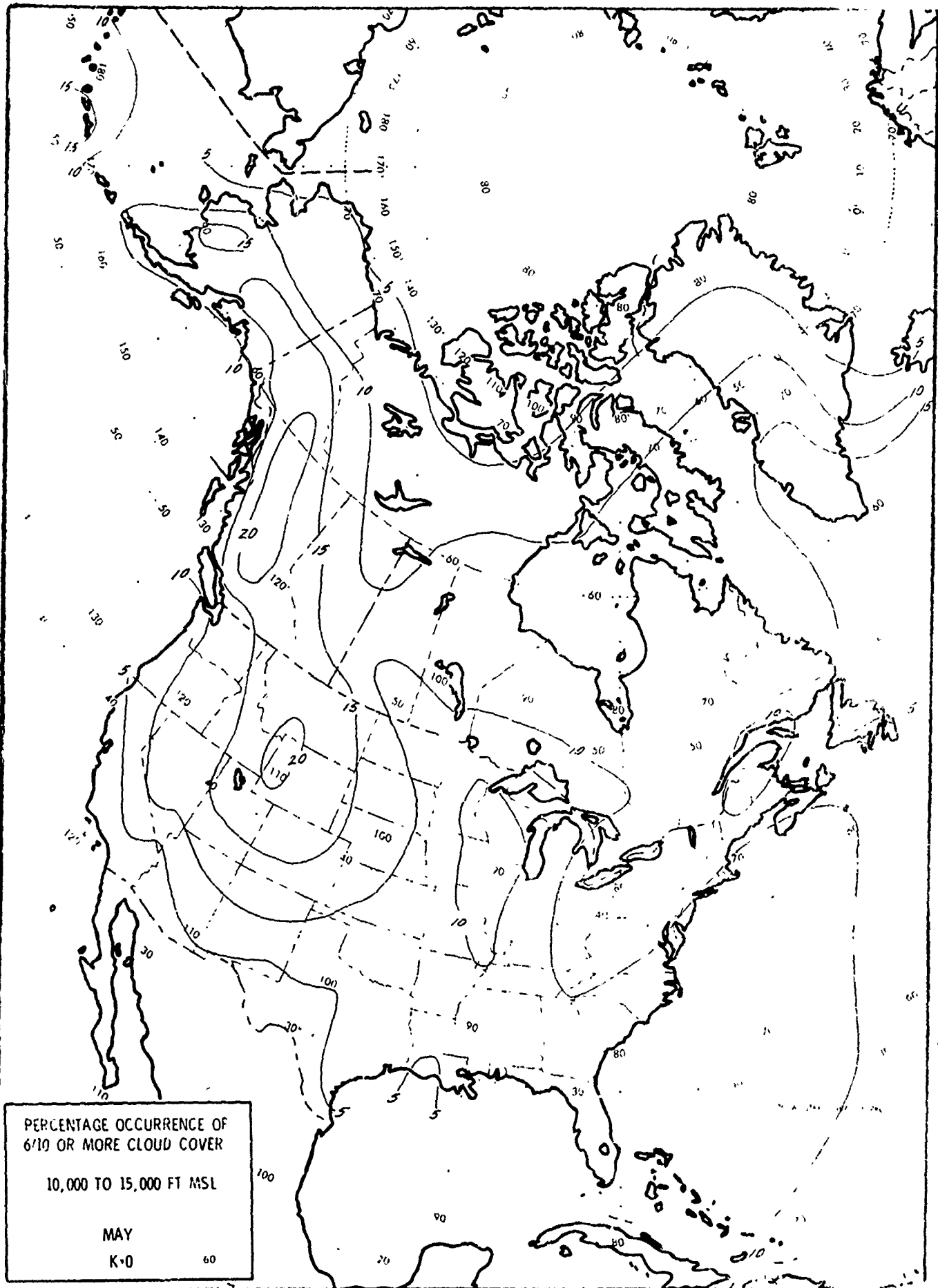
K=0

5m

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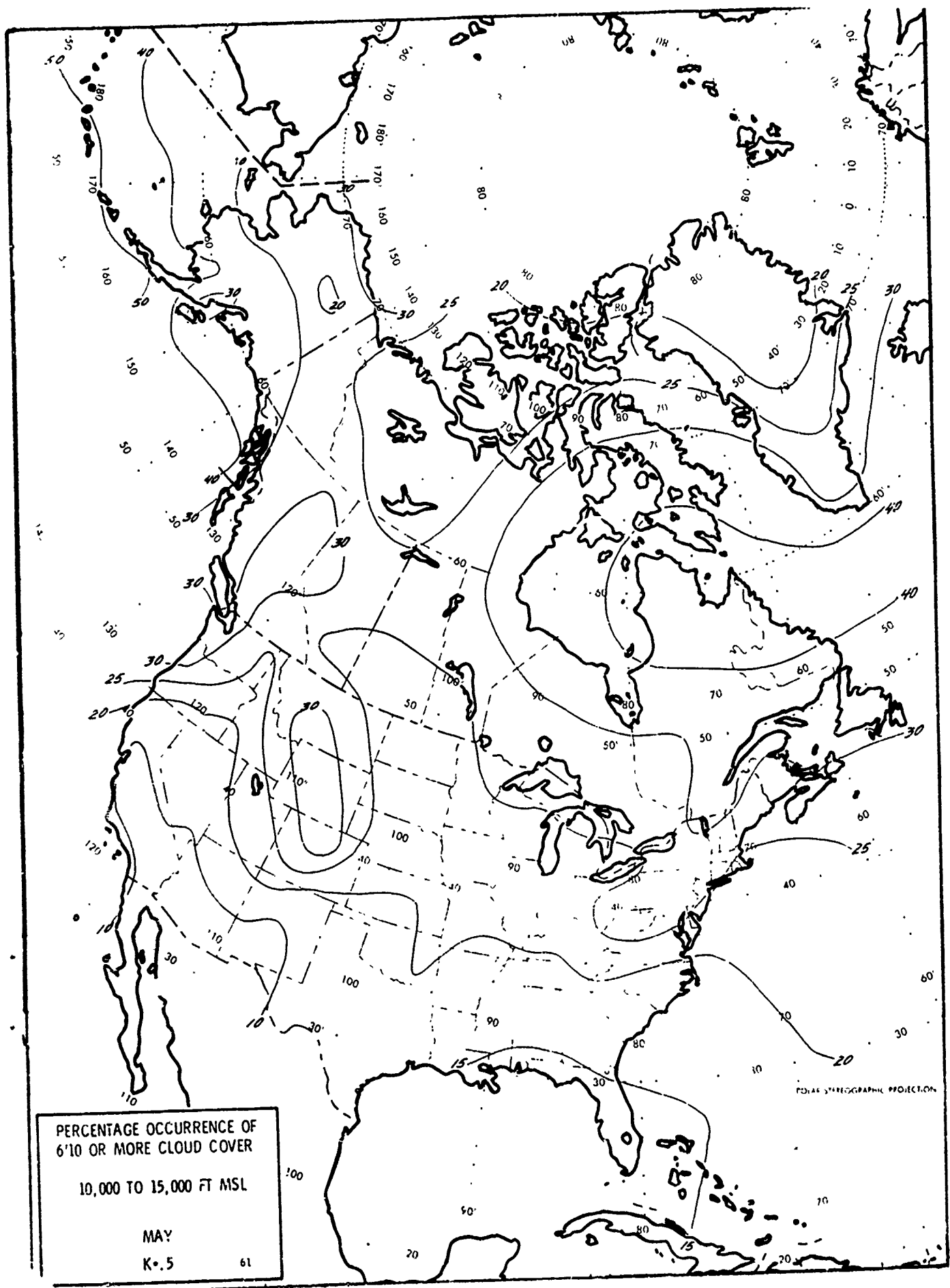
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

10,000 TO 15,000 FT MSL

MAY

K-0

60



PERCENTAGE OCCURRENCE OF
6'10 OR MORE CLOUD COVER

10,000 TO 15,000 FT MSL

MAY

K=5

61

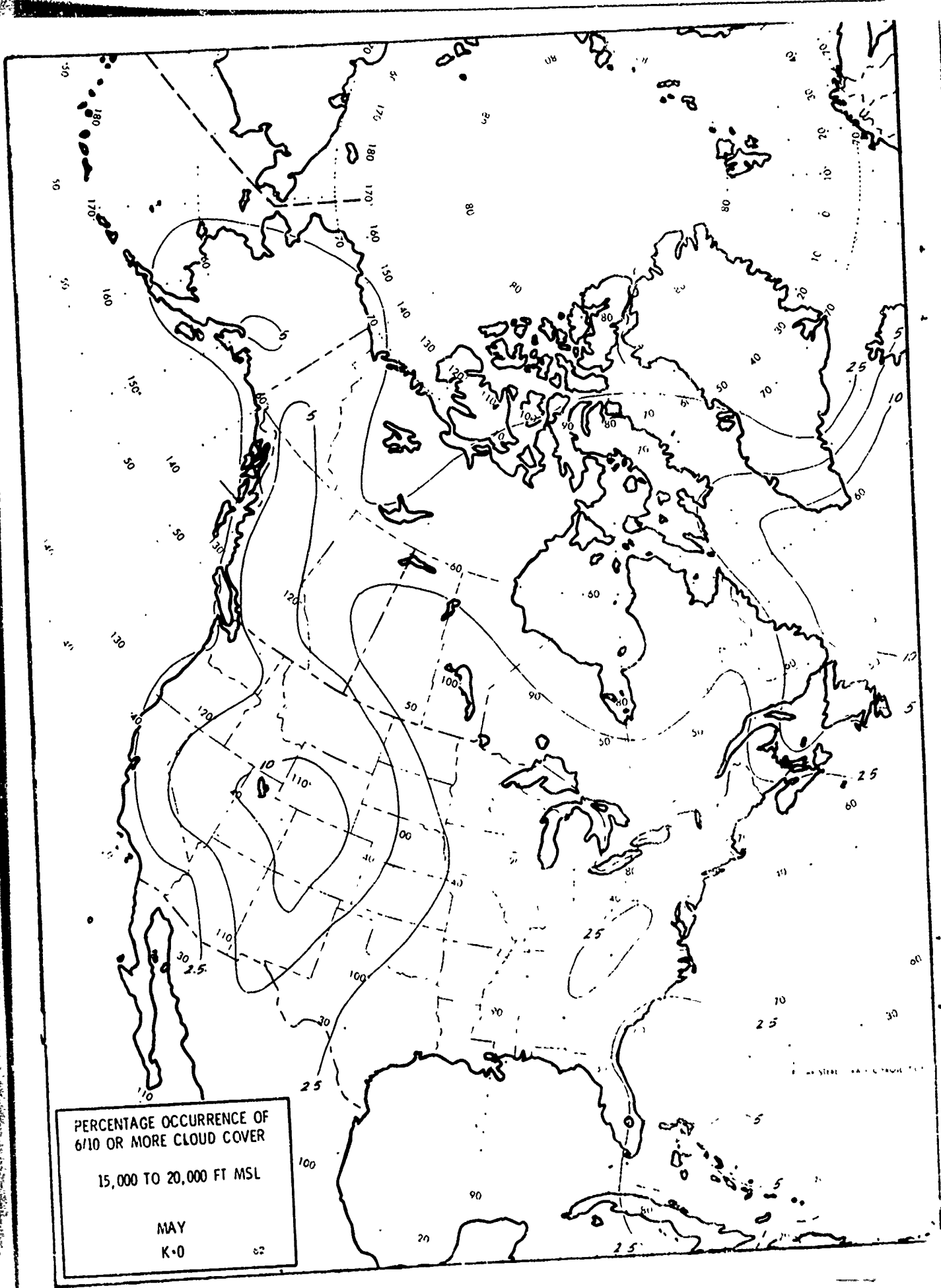
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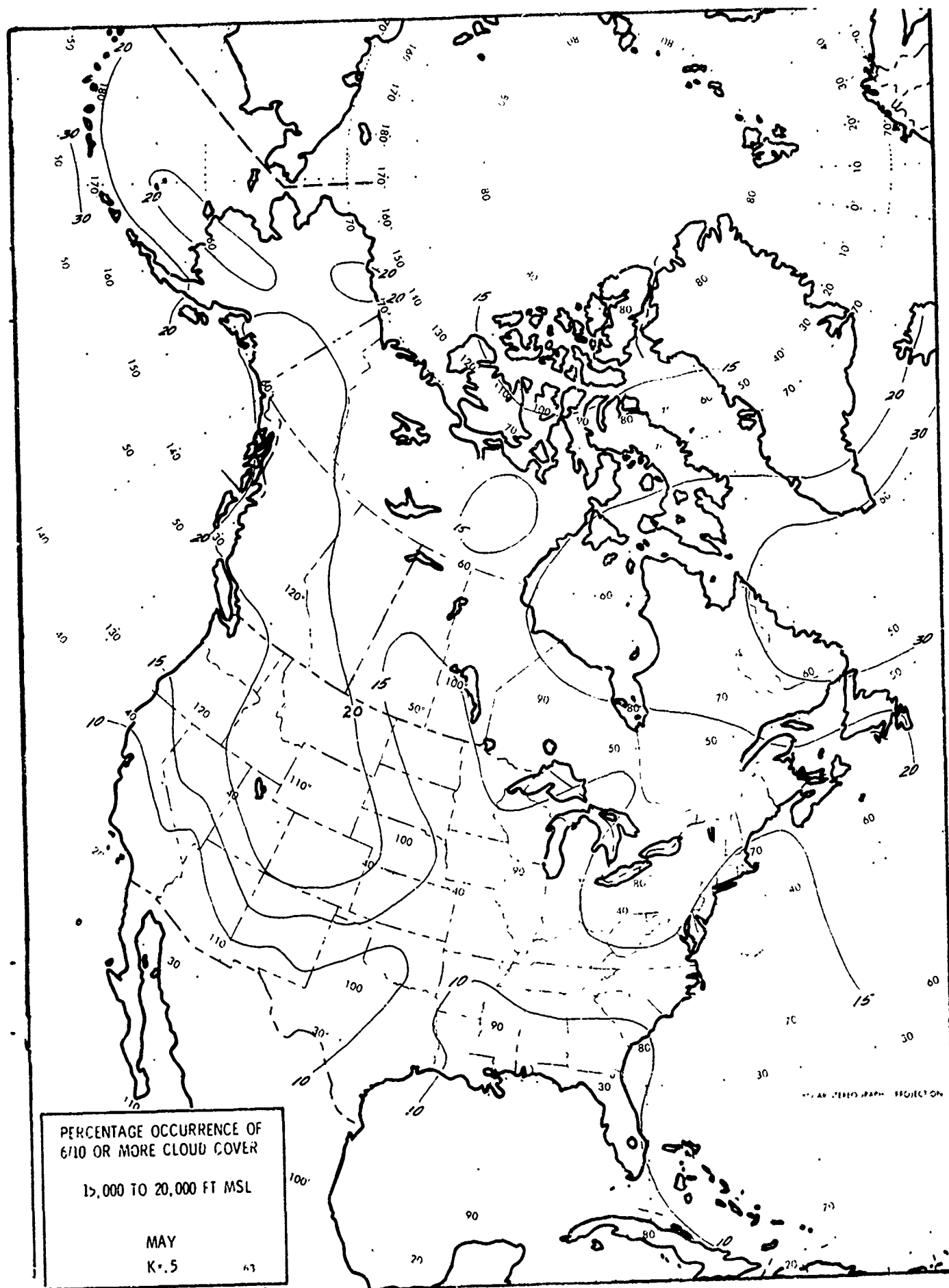
15,000 TO 20,000 FT MSL

MAY

K-O

62



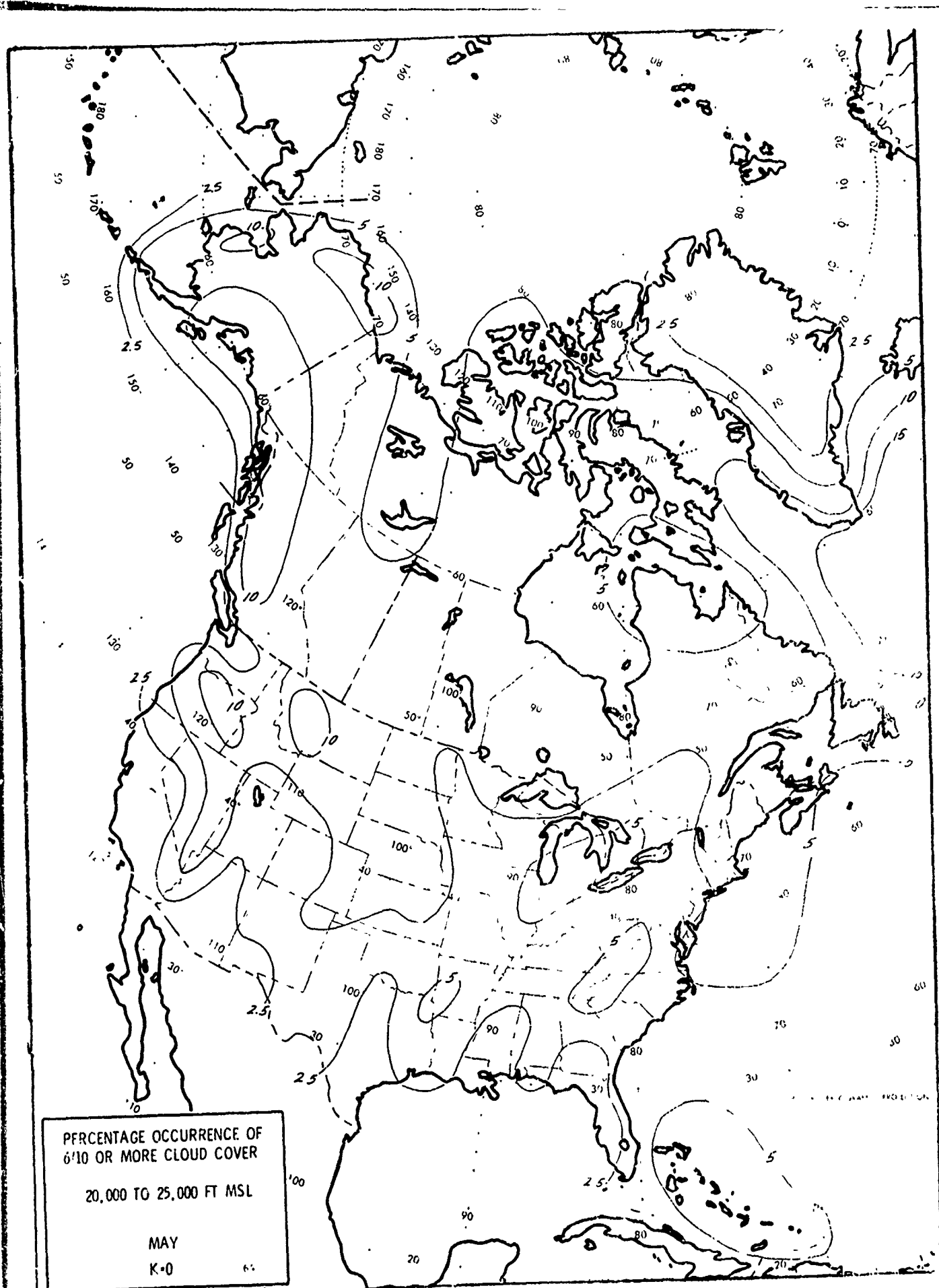


PERCENTAGE OCCURRENCE OF
6'10 OR MORE CLOUD COVER

20,000 TO 25,000 FT MSL

MAY

K-0



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

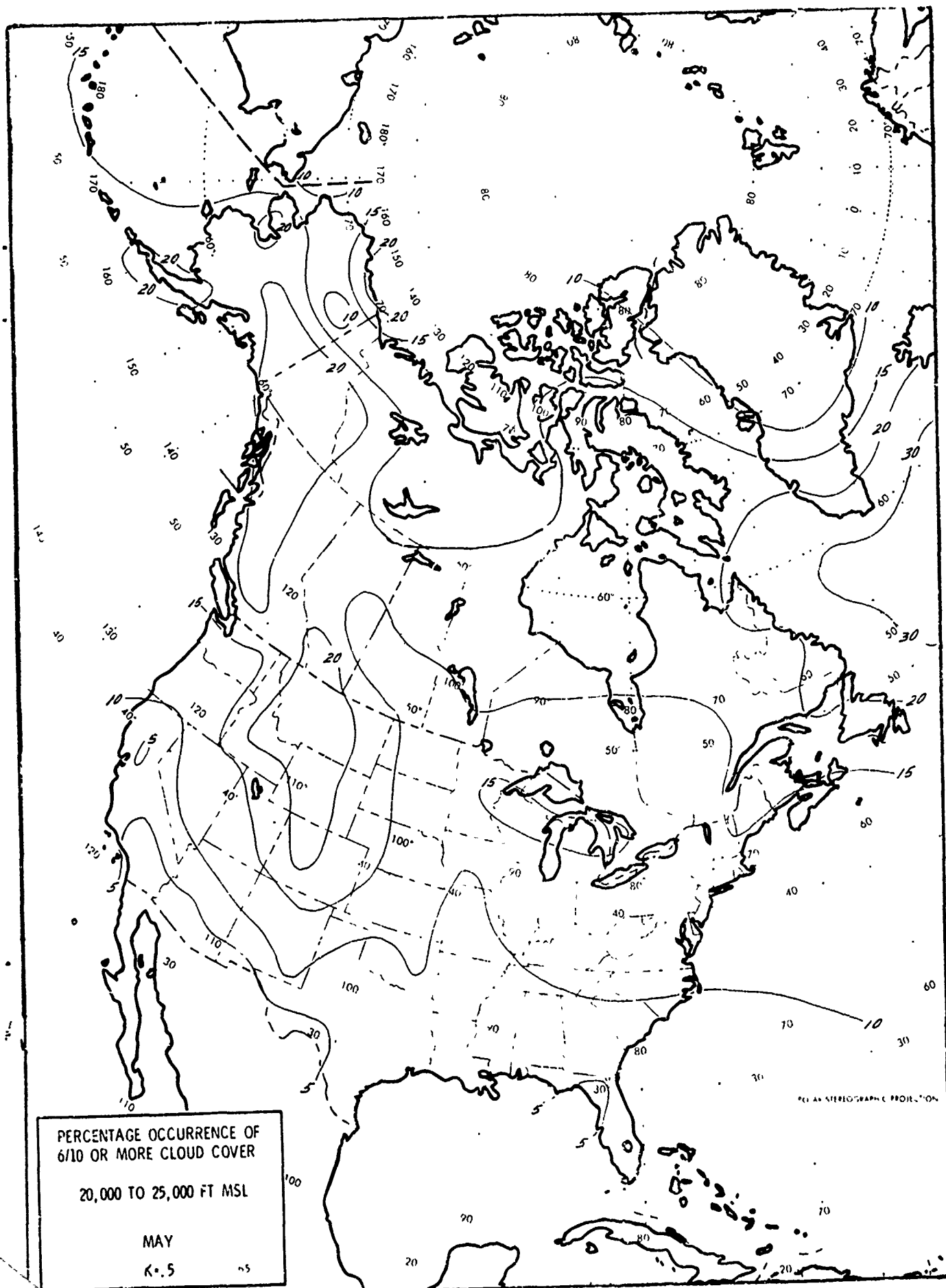
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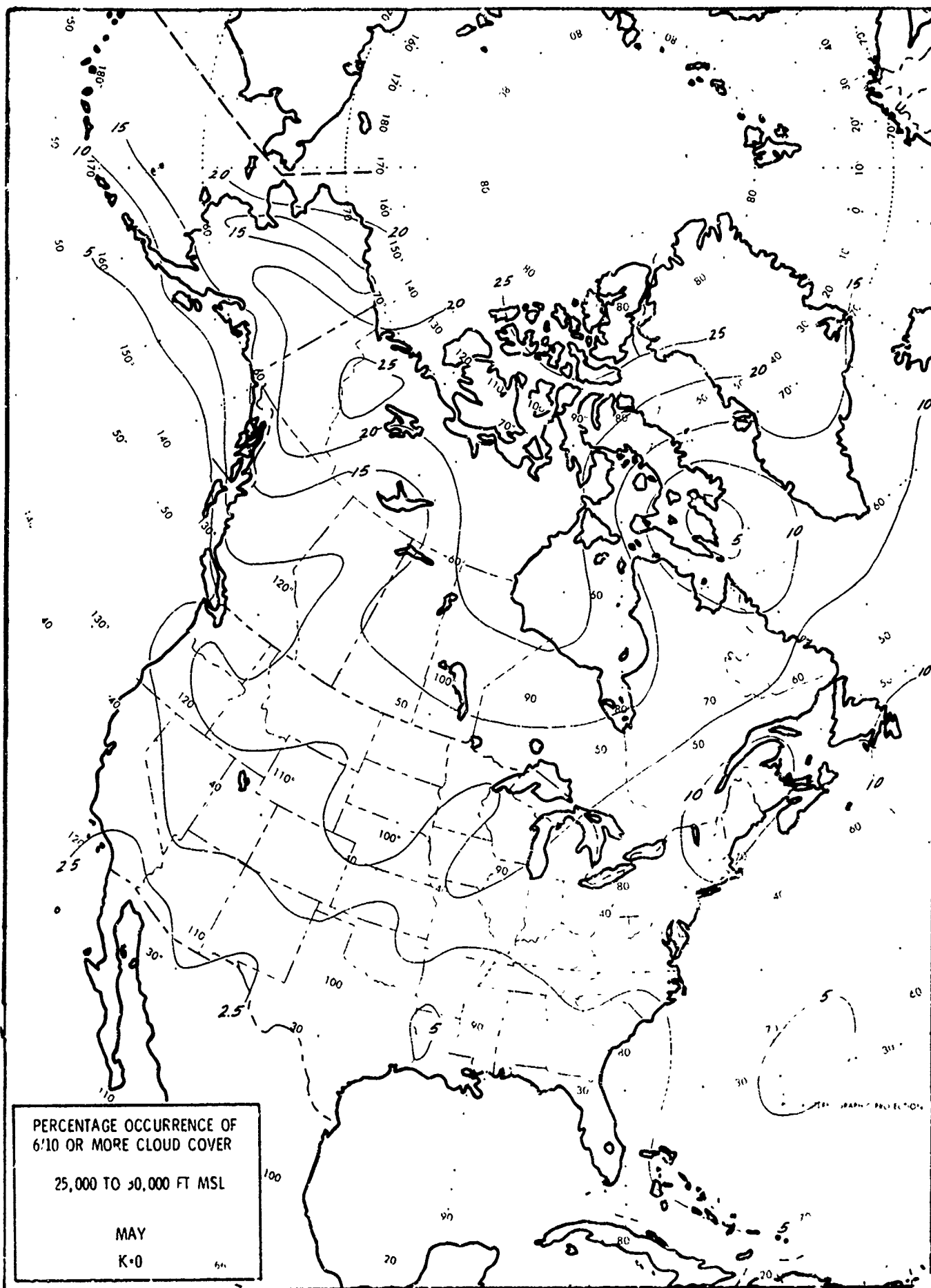
MAY

K_{0.5}

ms

SEE AN STEREOGRAPHIC PROJECTION



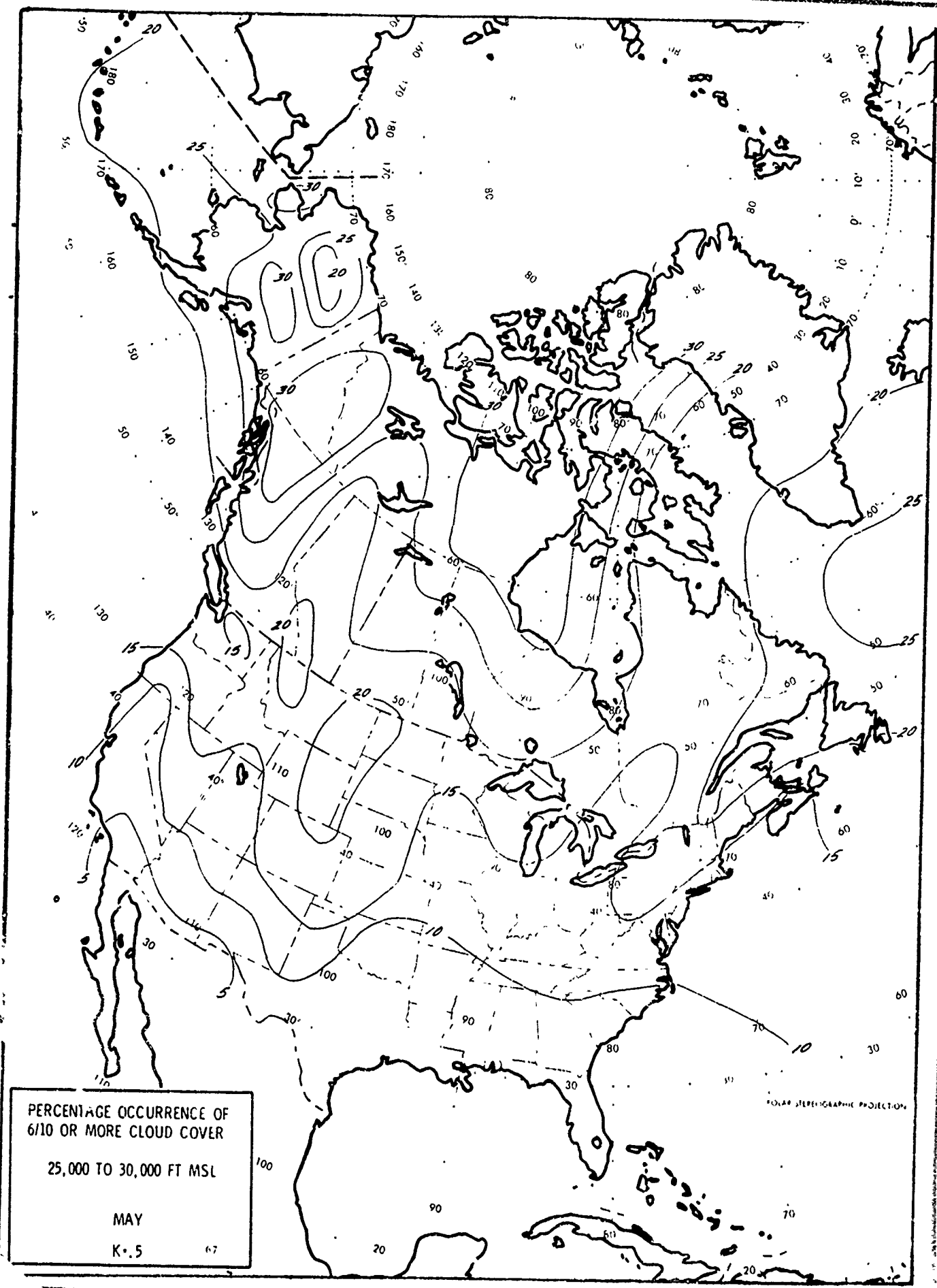


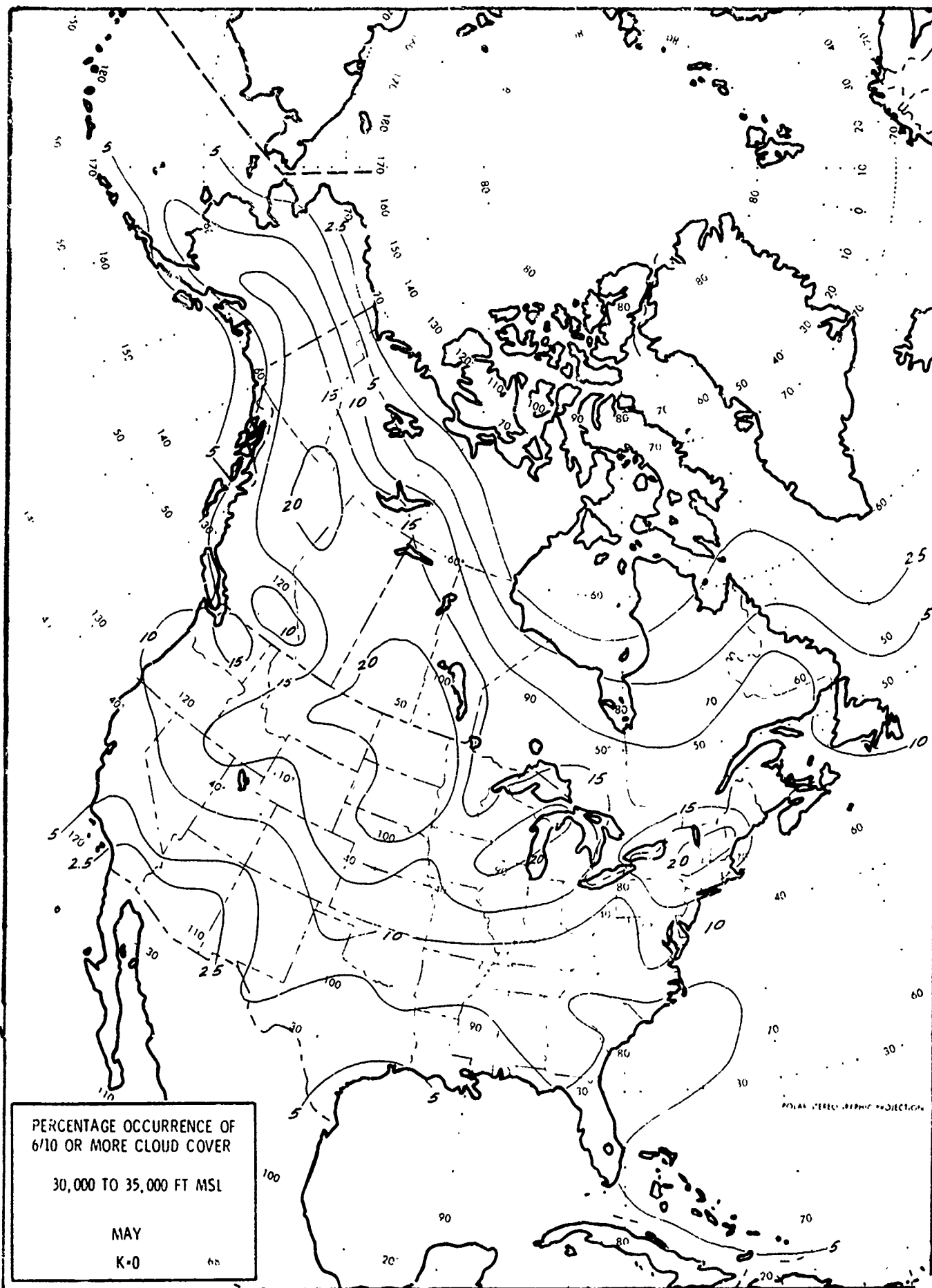
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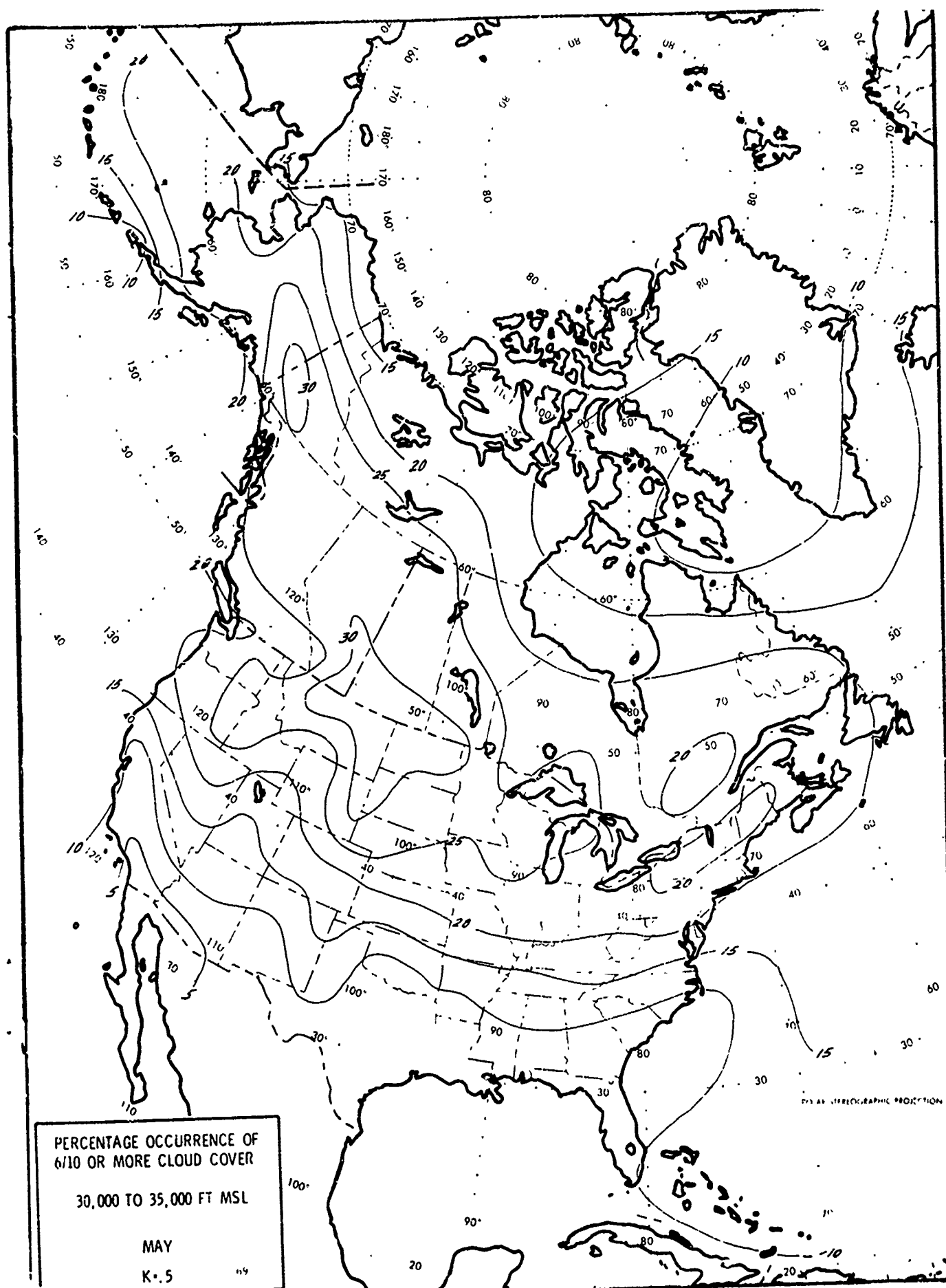
25,000 TO 30,000 FT MSL

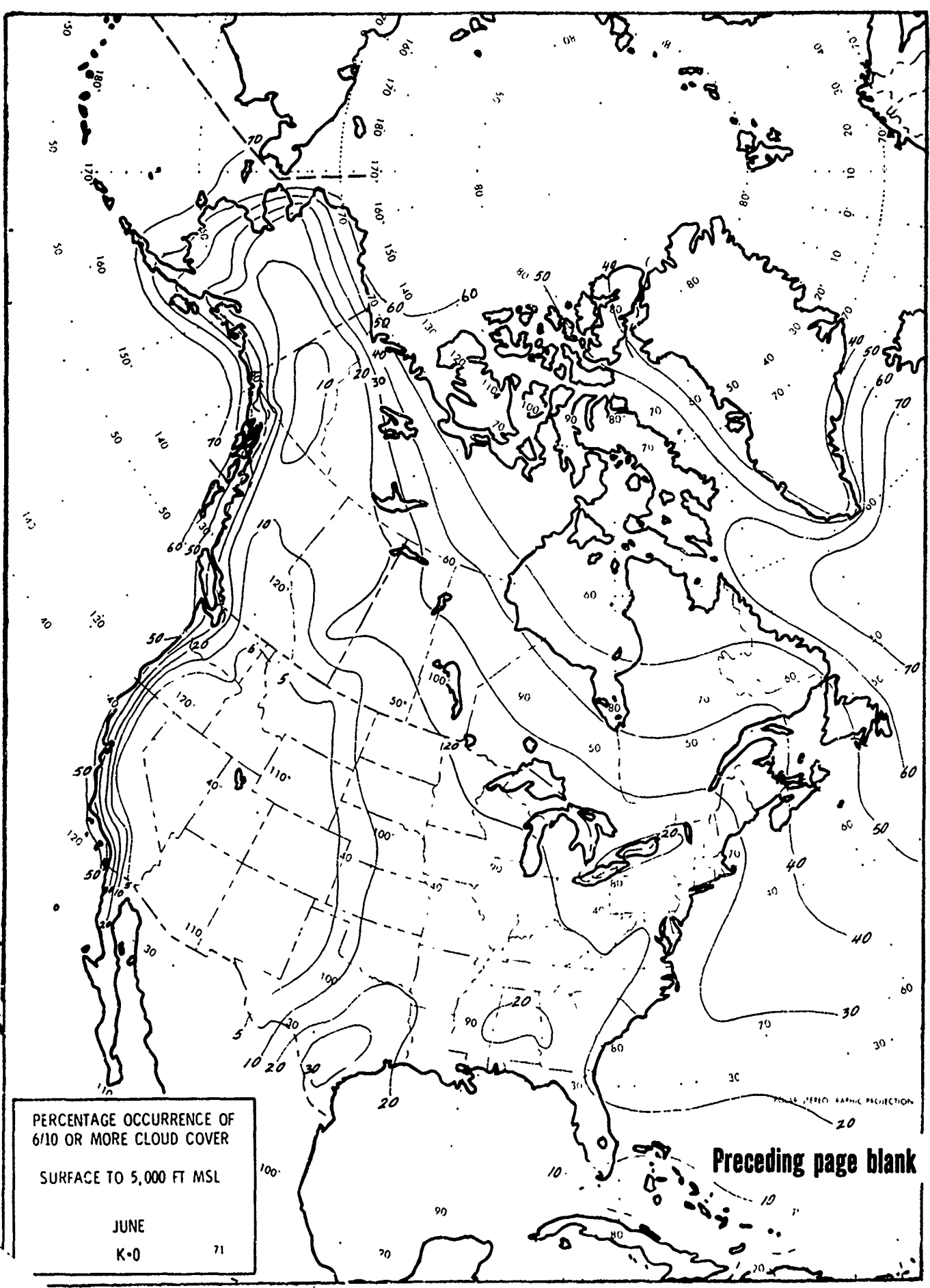
MAY

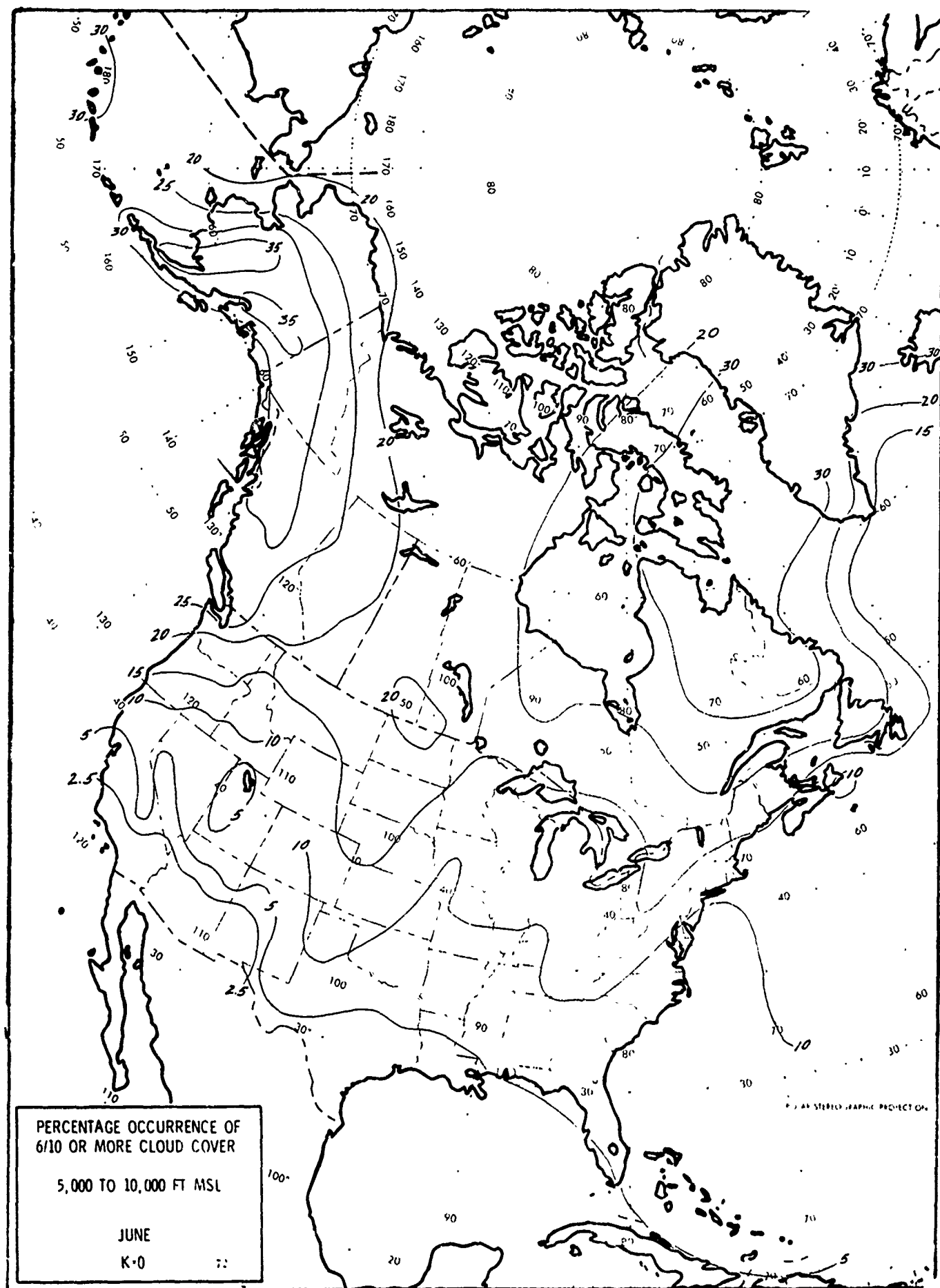
K-0









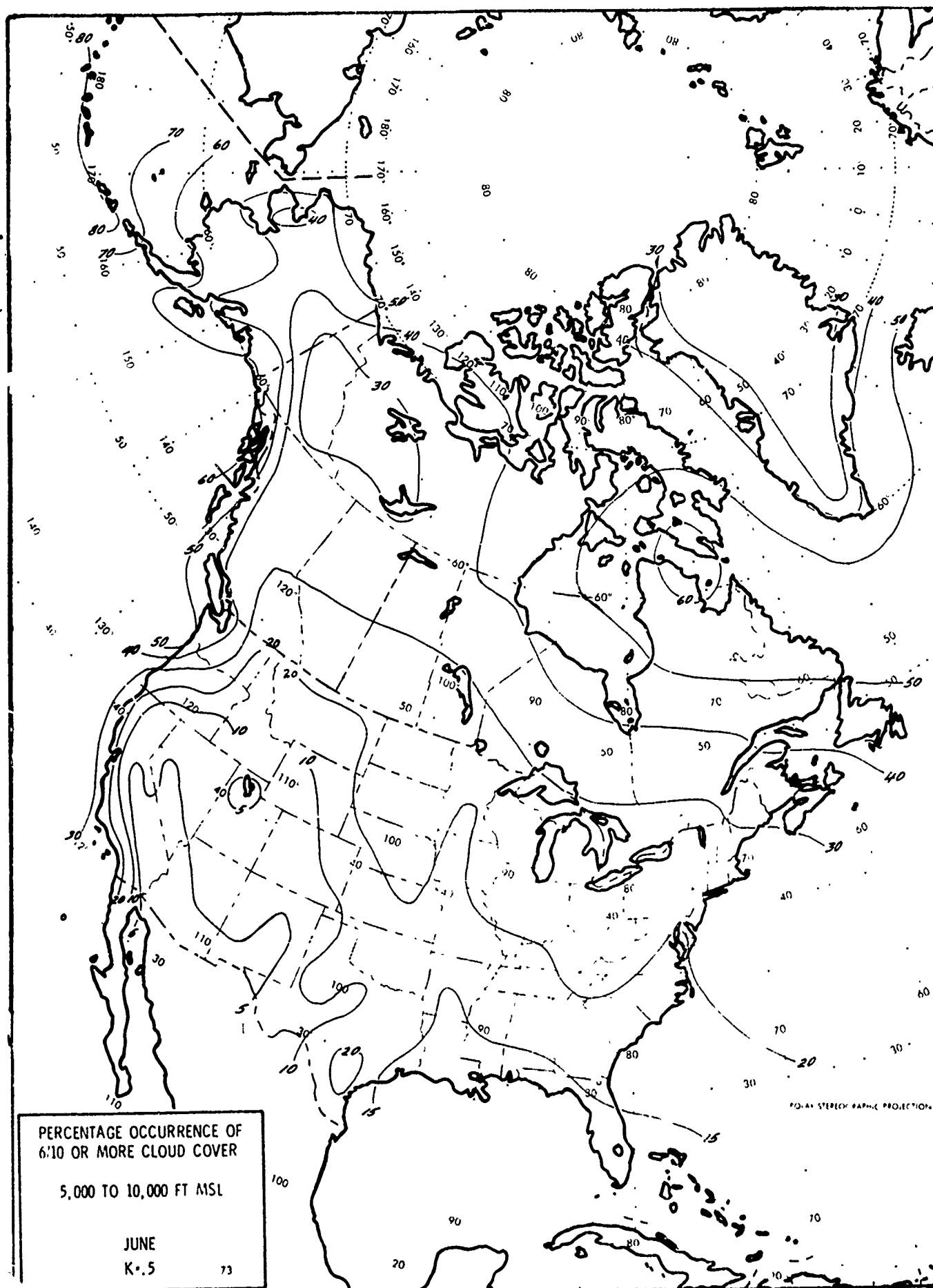


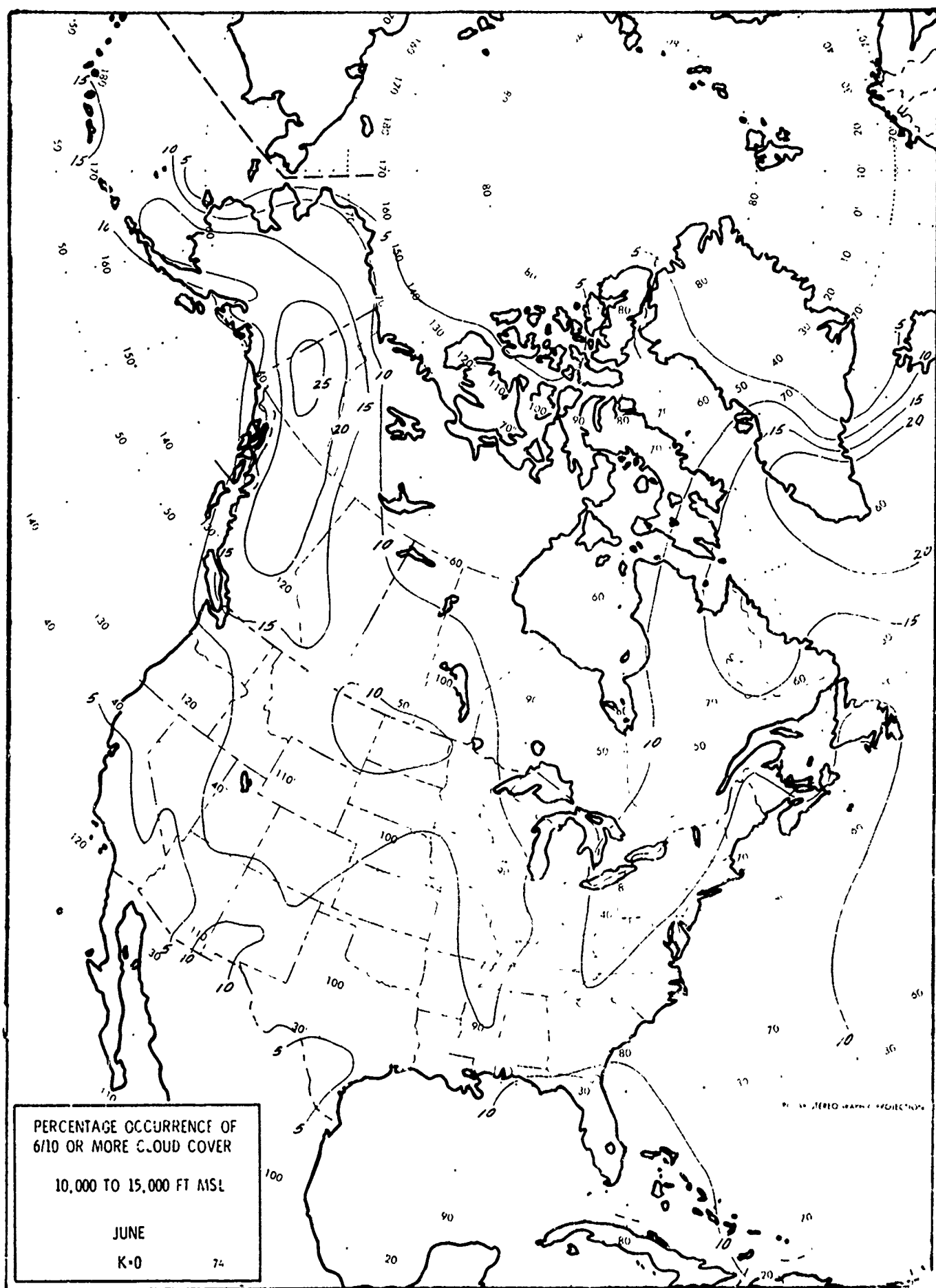
AN STEREOGRAPHIC PROJECTION

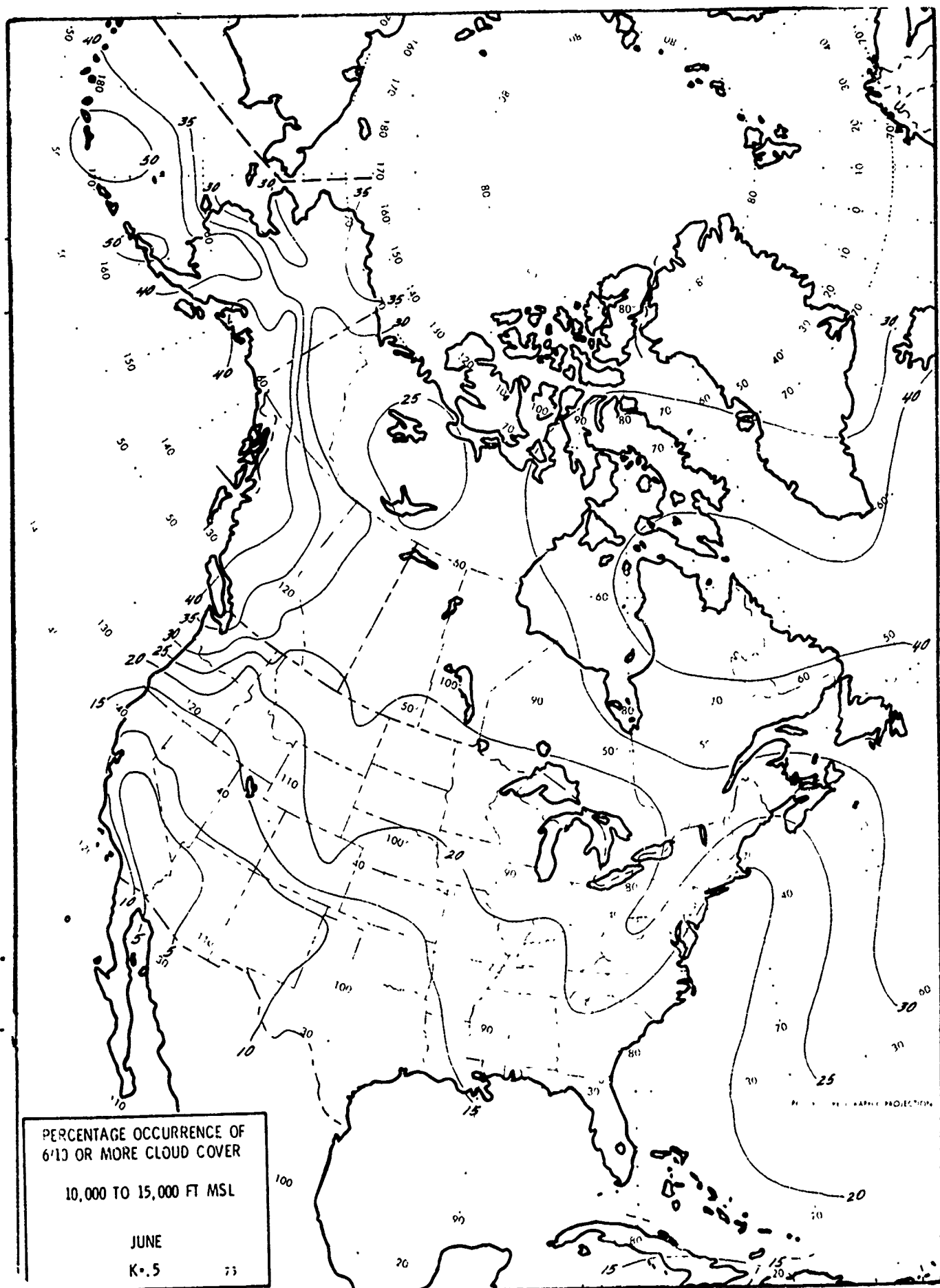
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

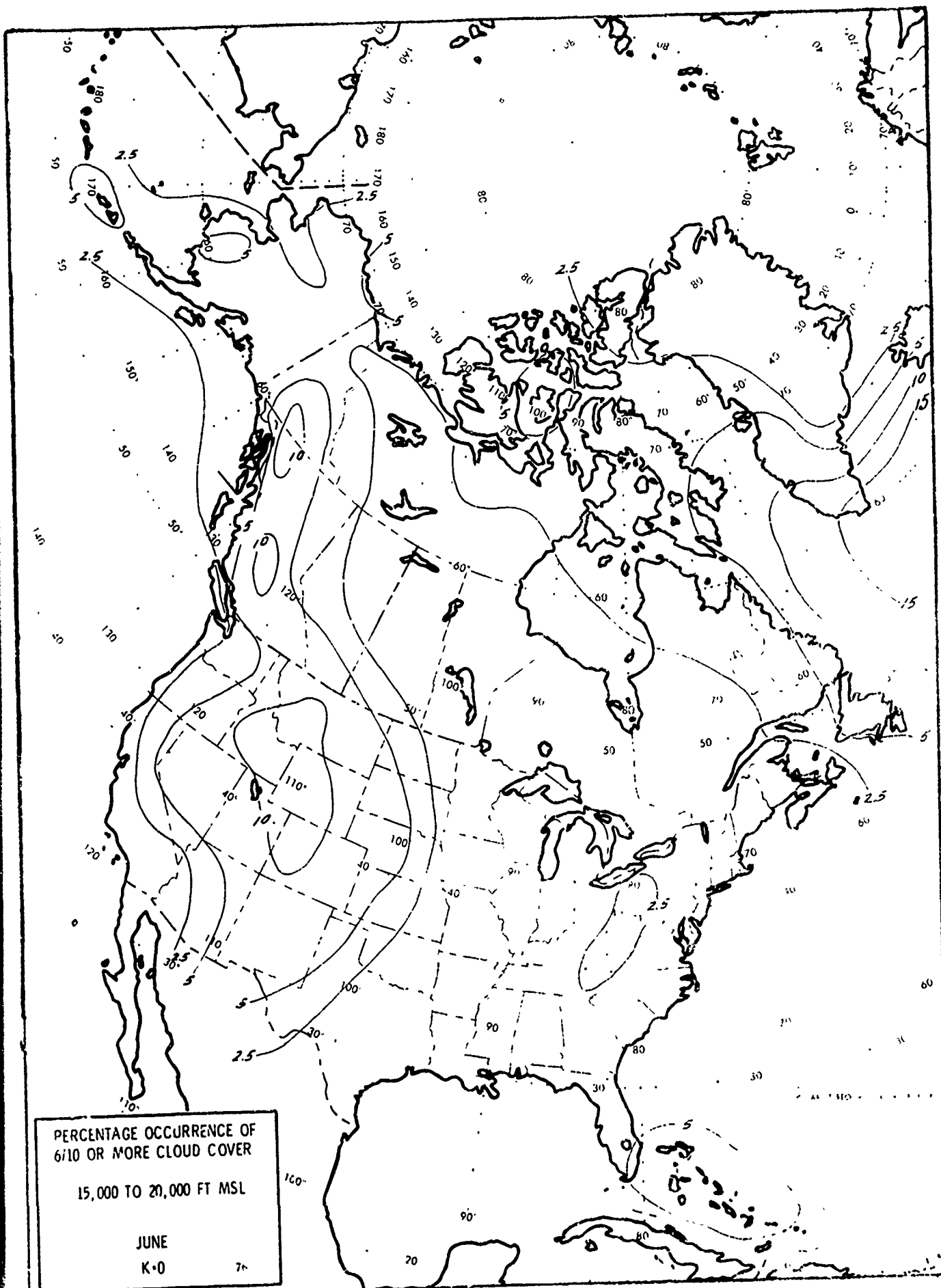
5,000 TO 10,000 FT MSL

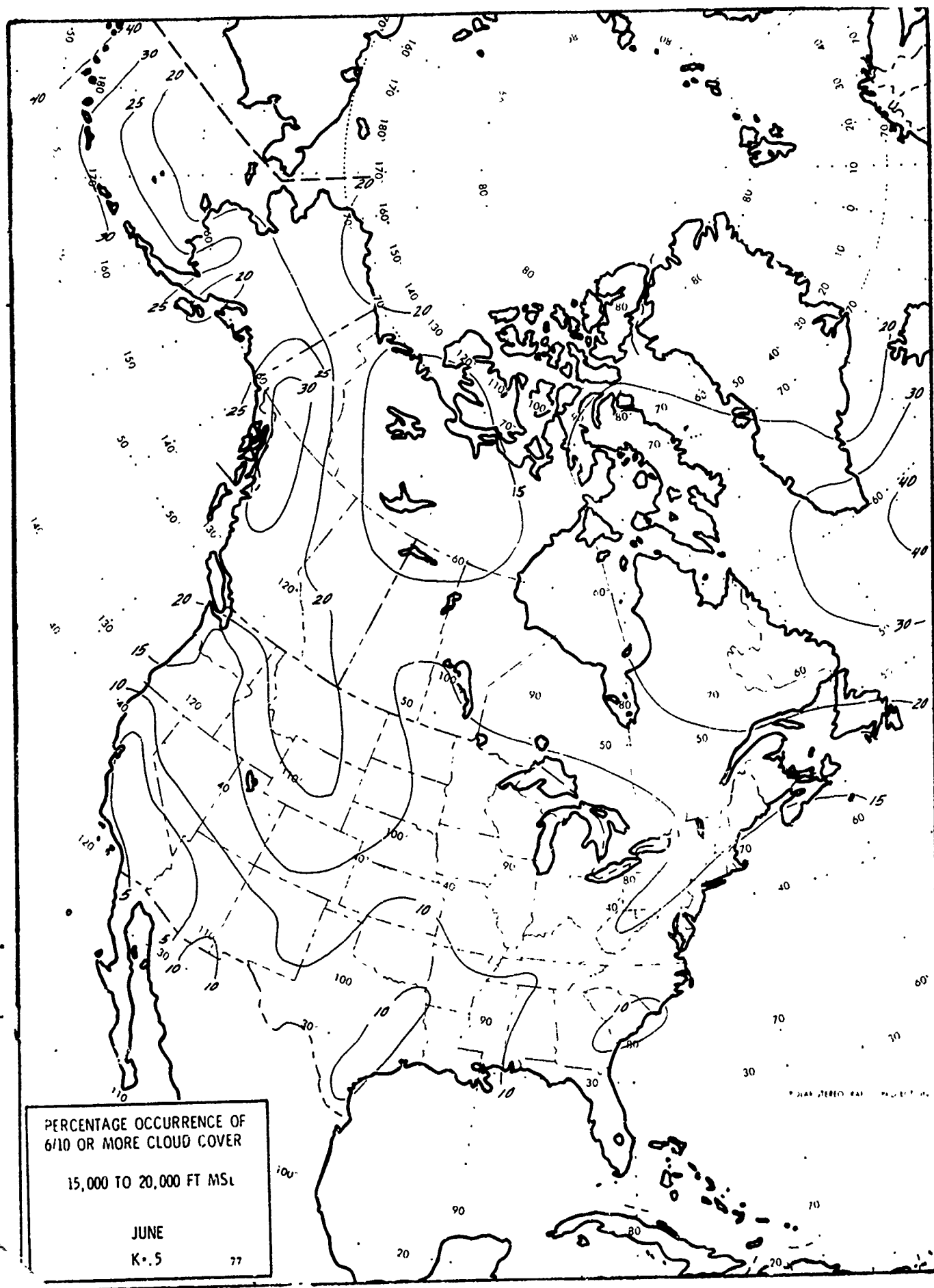
JUNE
K-0

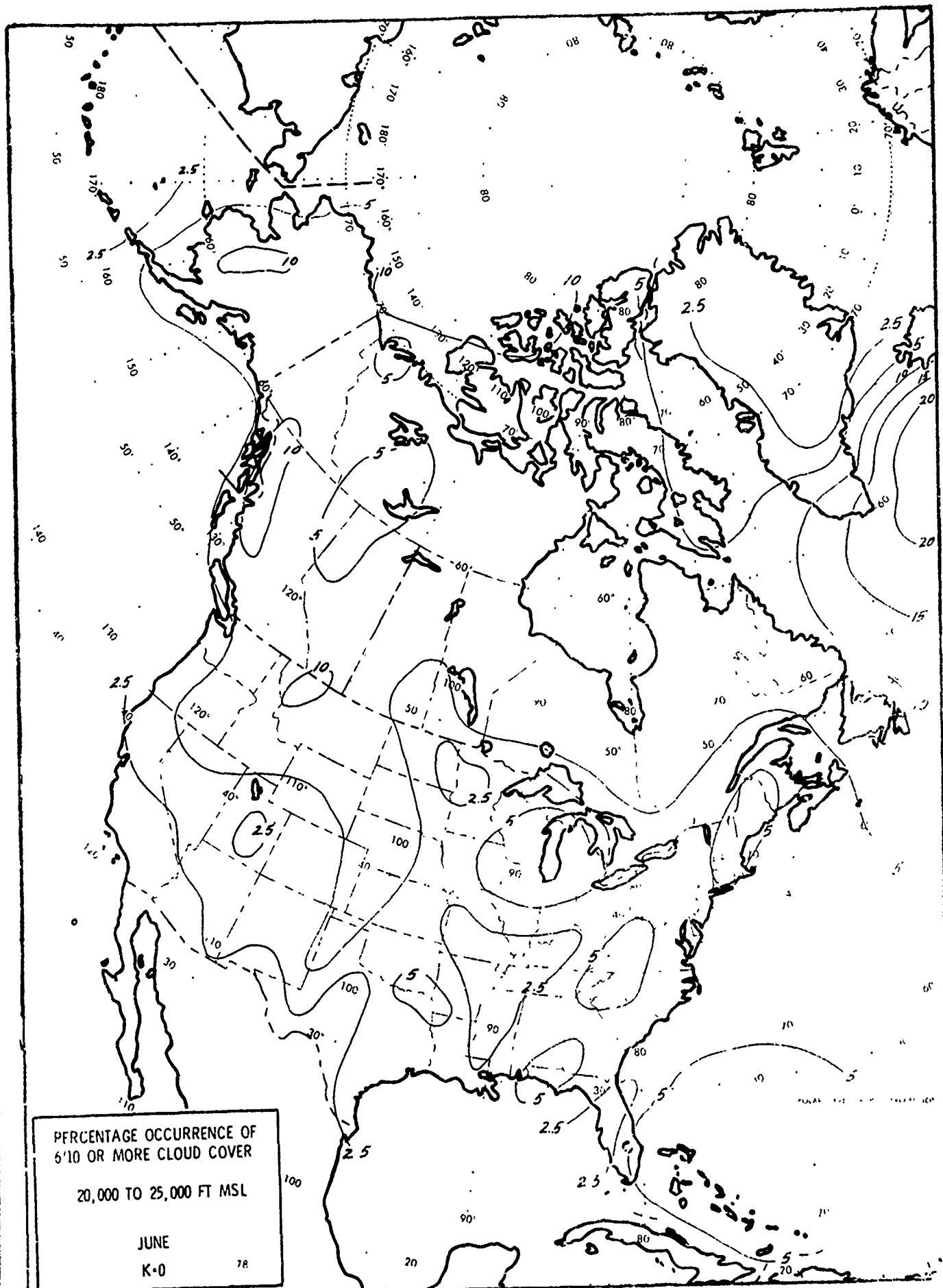


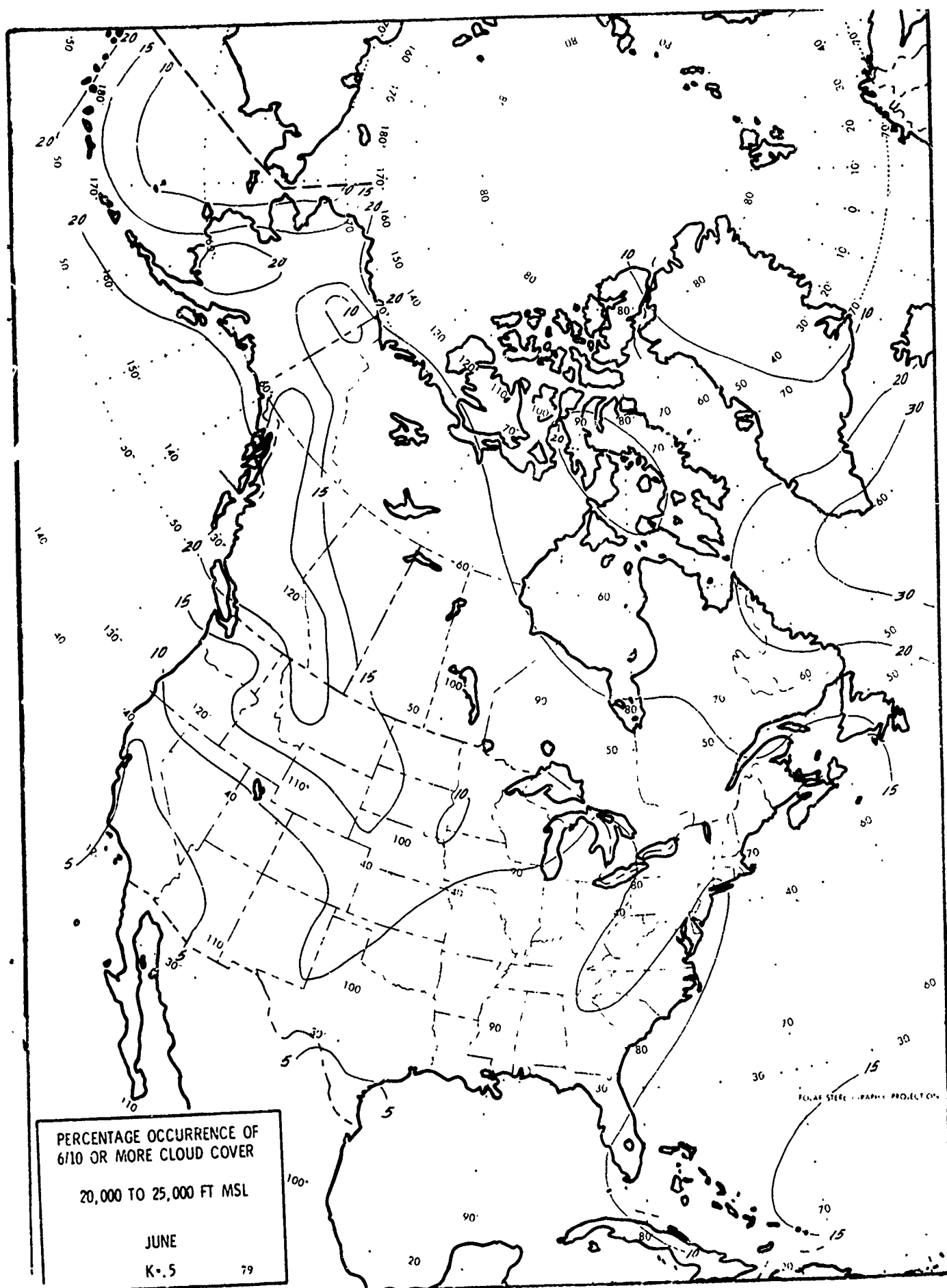


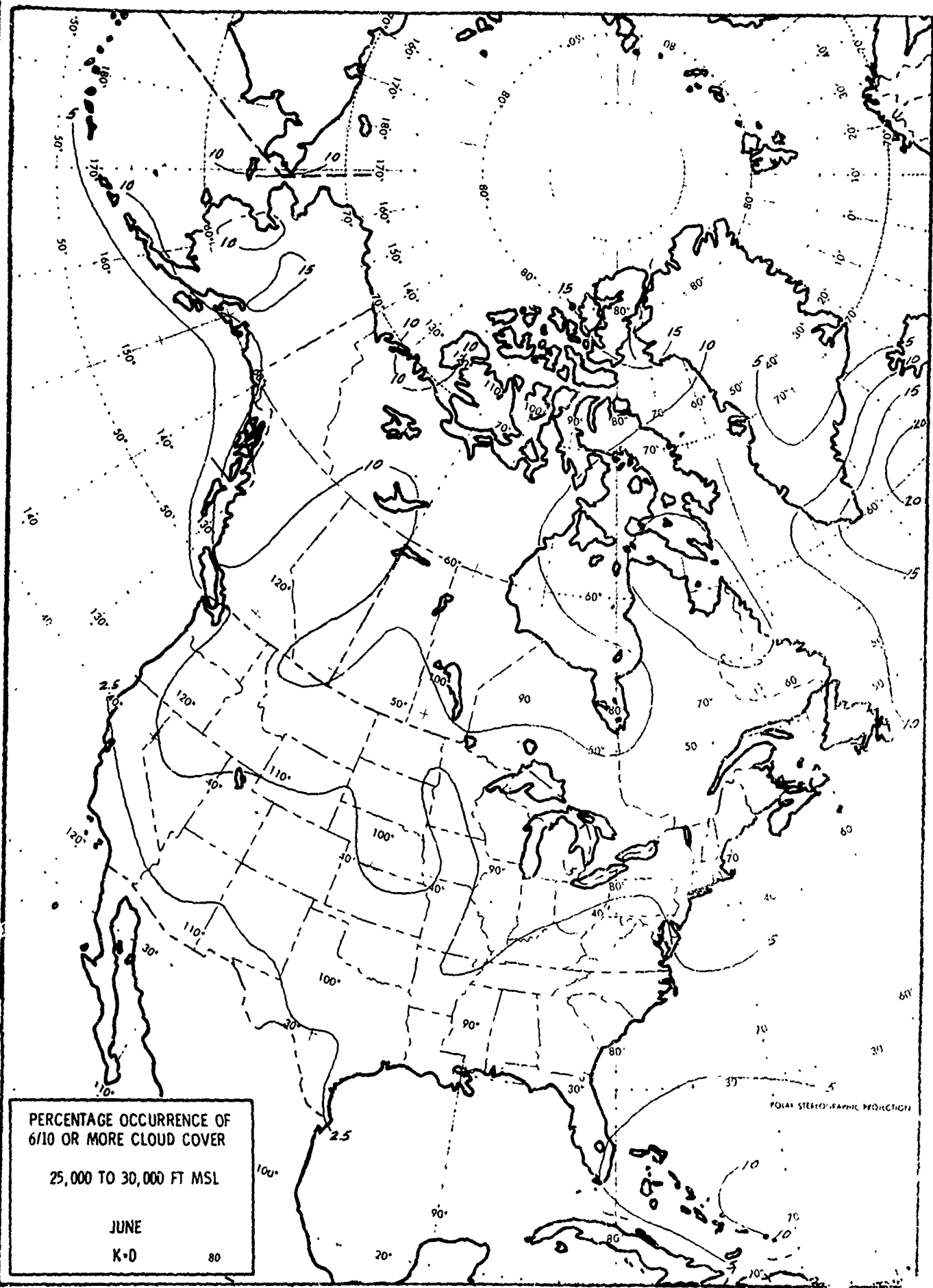












PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

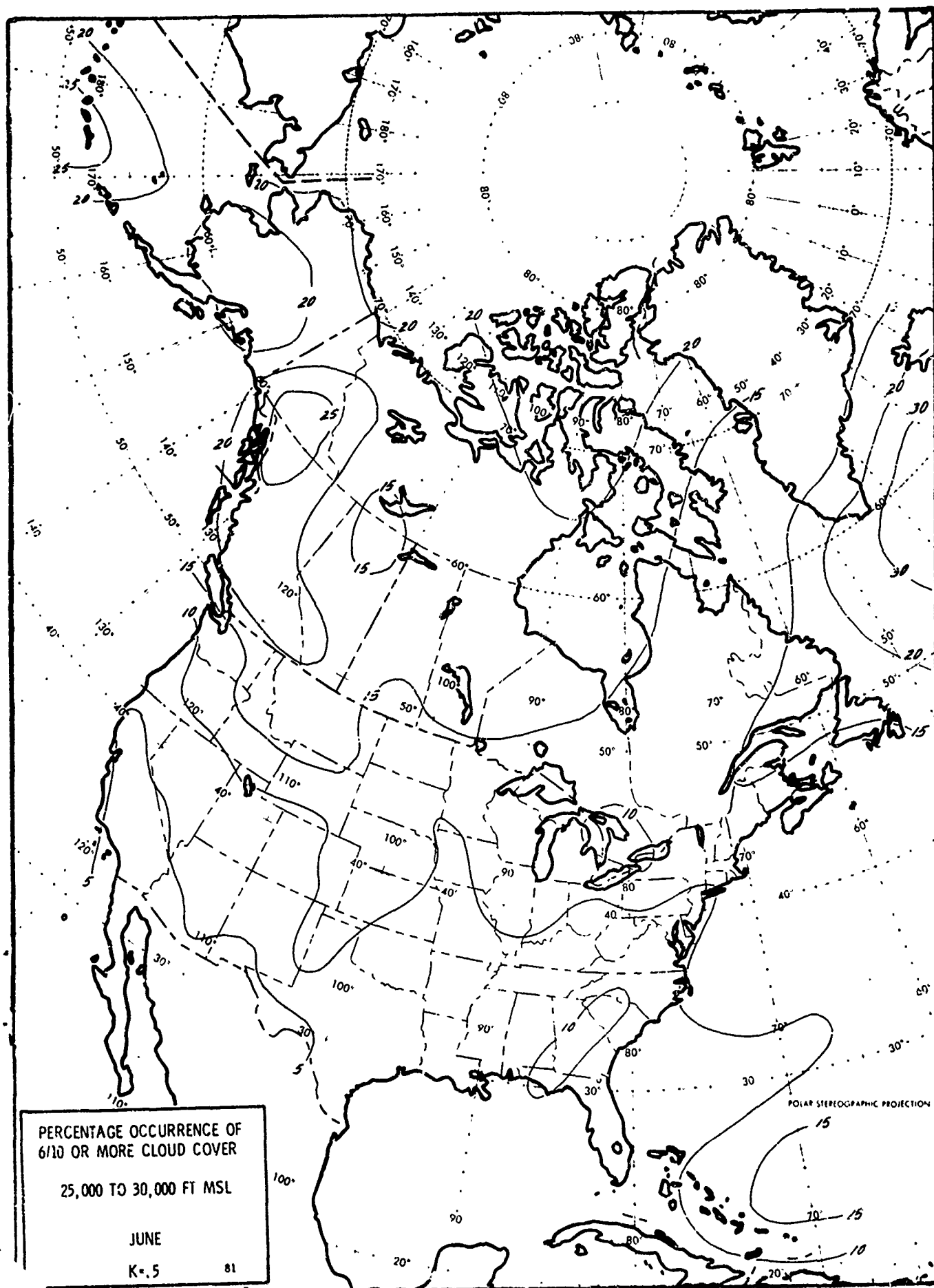
25,000 TO 30,000 FT MSL

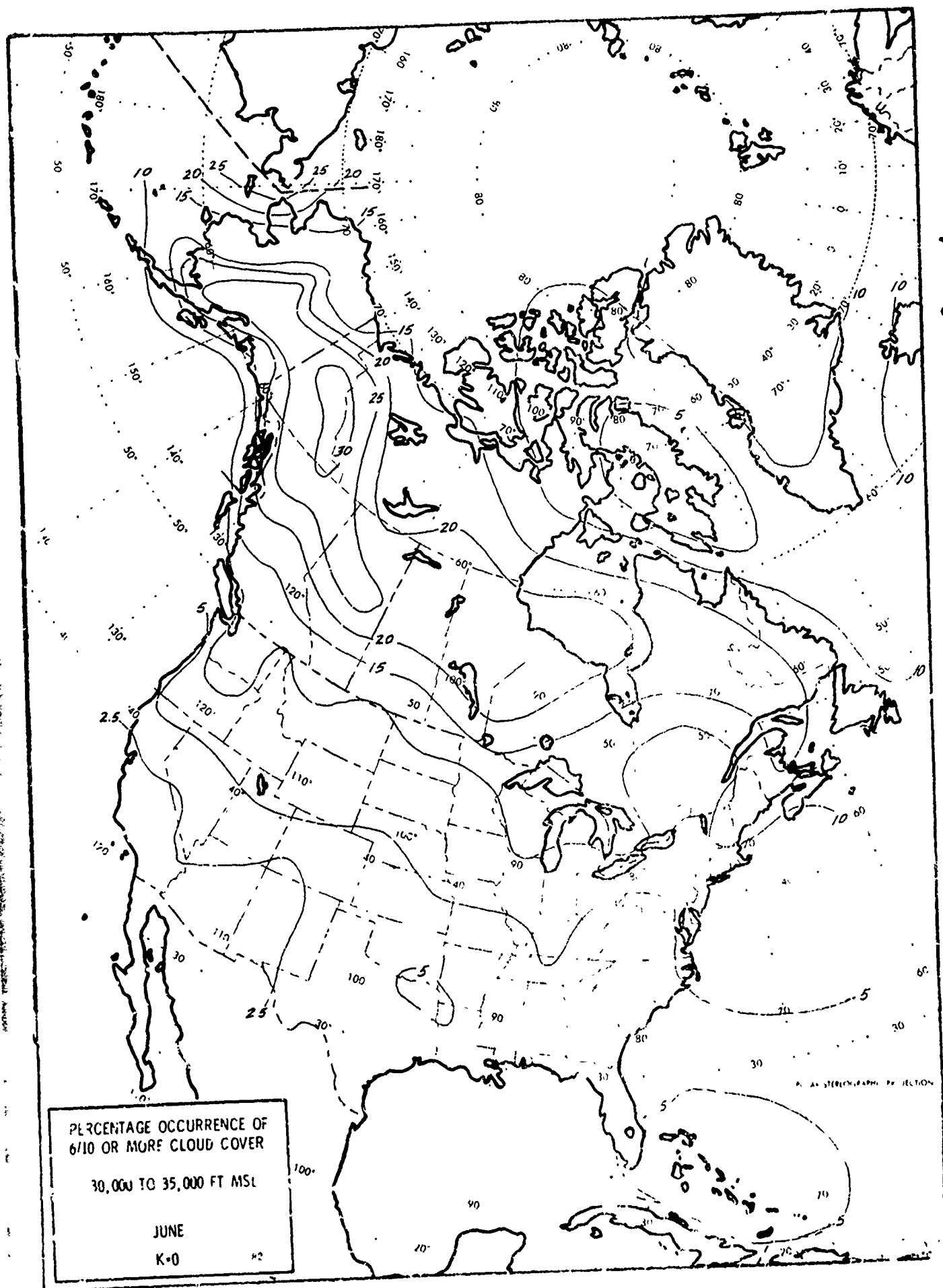
JUNE

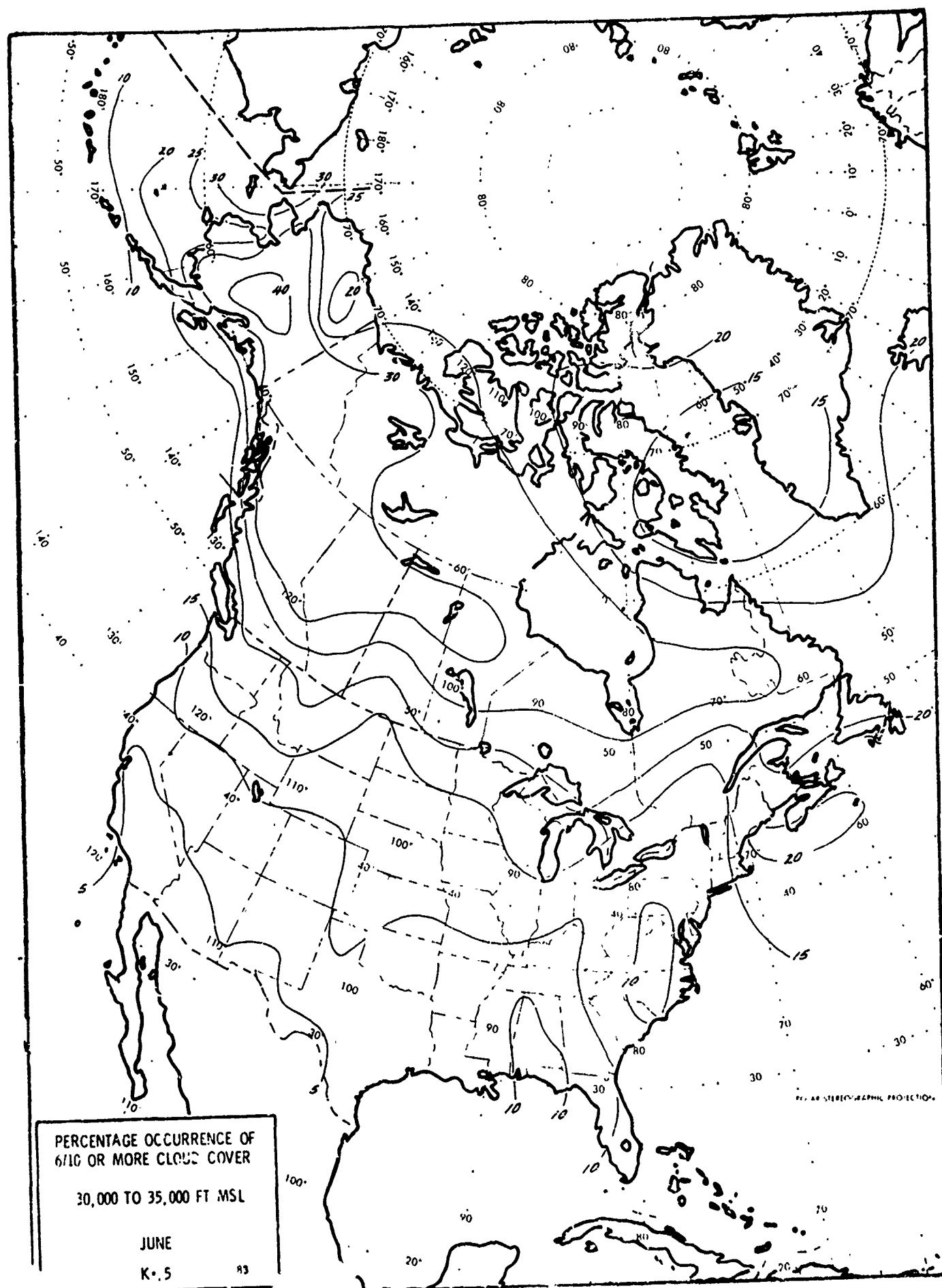
K-D

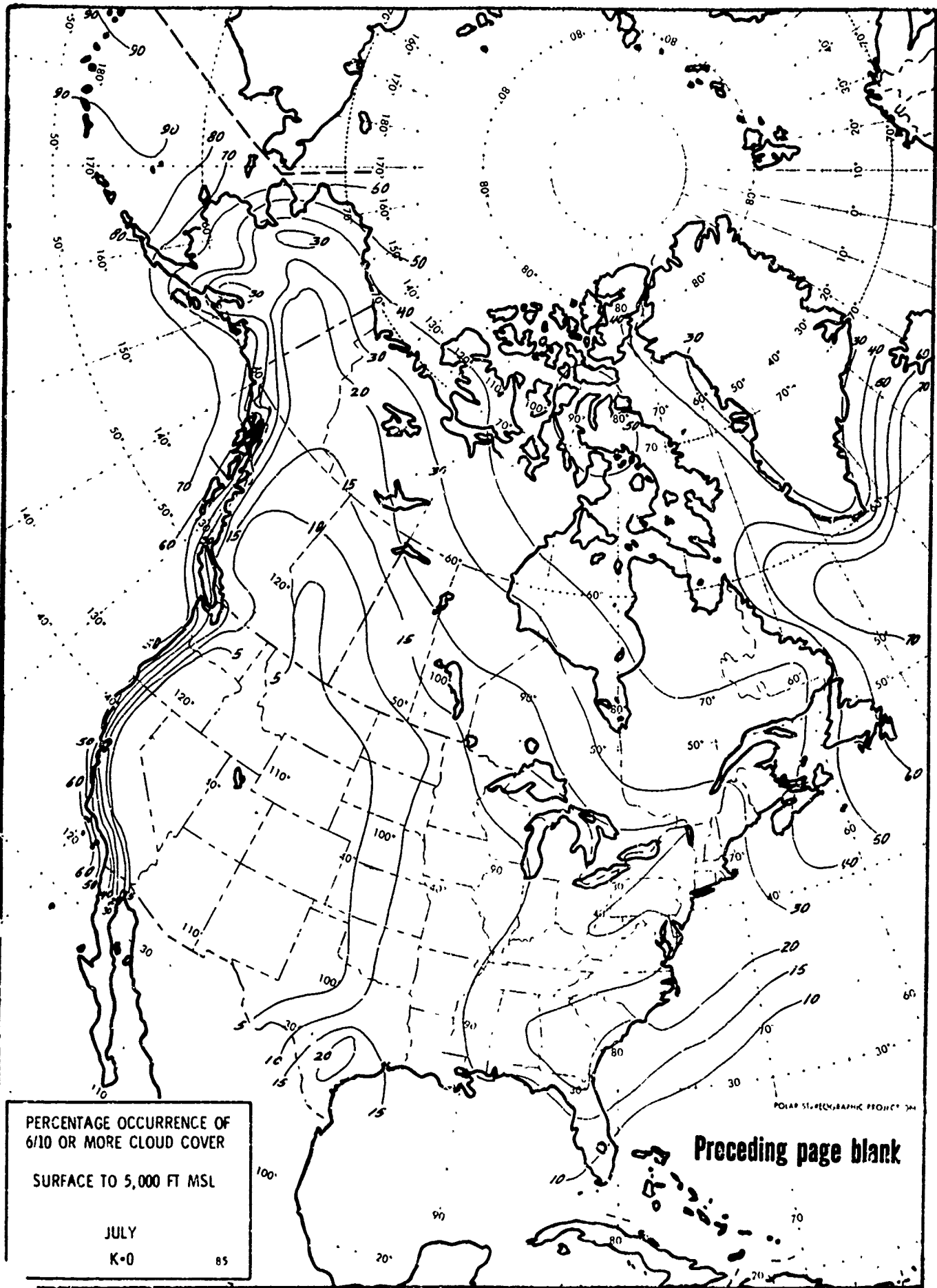
80

POLAR STEREOGRAPHIC PROJECTION









PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

SURFACE TO 5,000 FT MSL

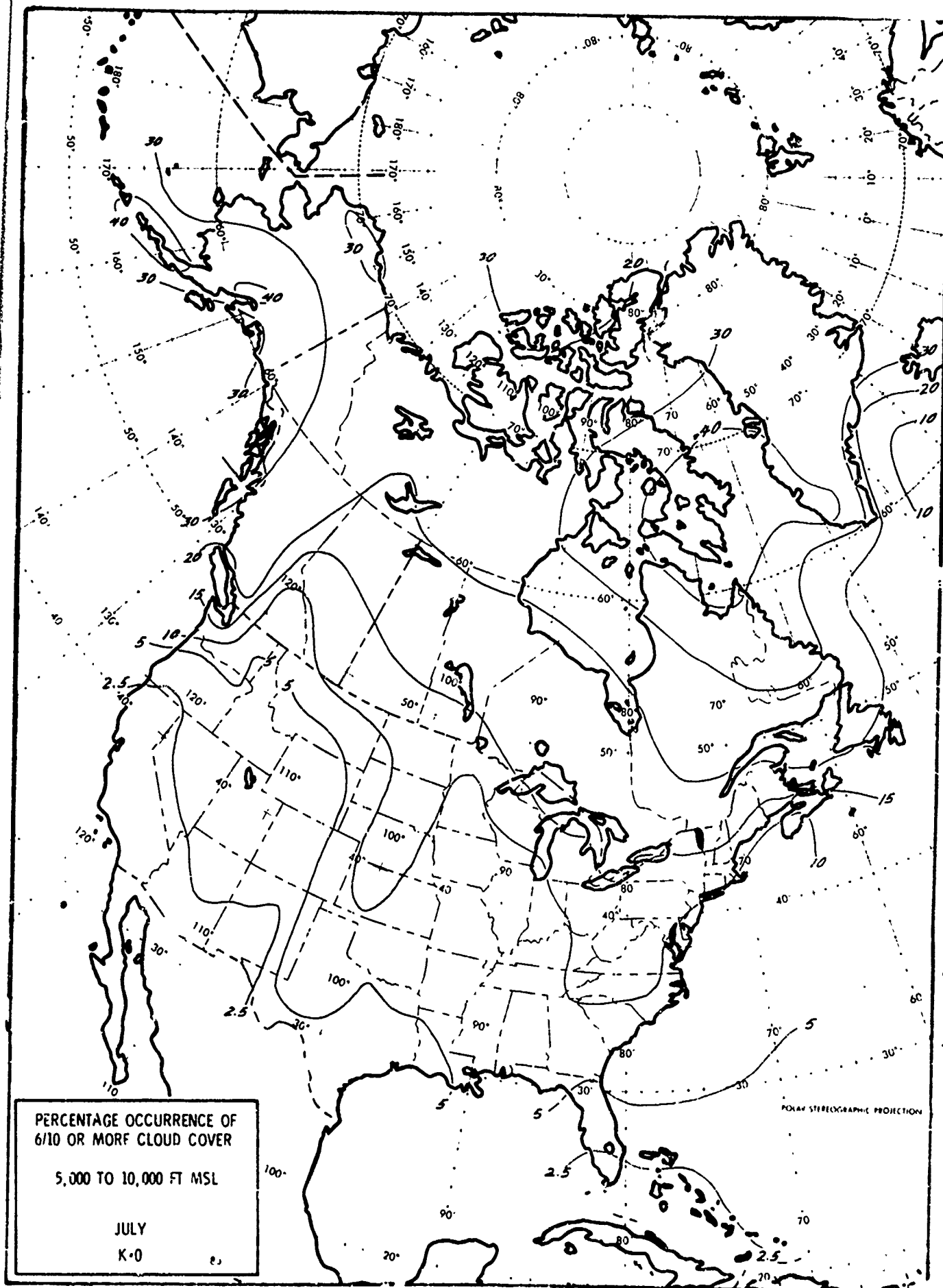
JULY

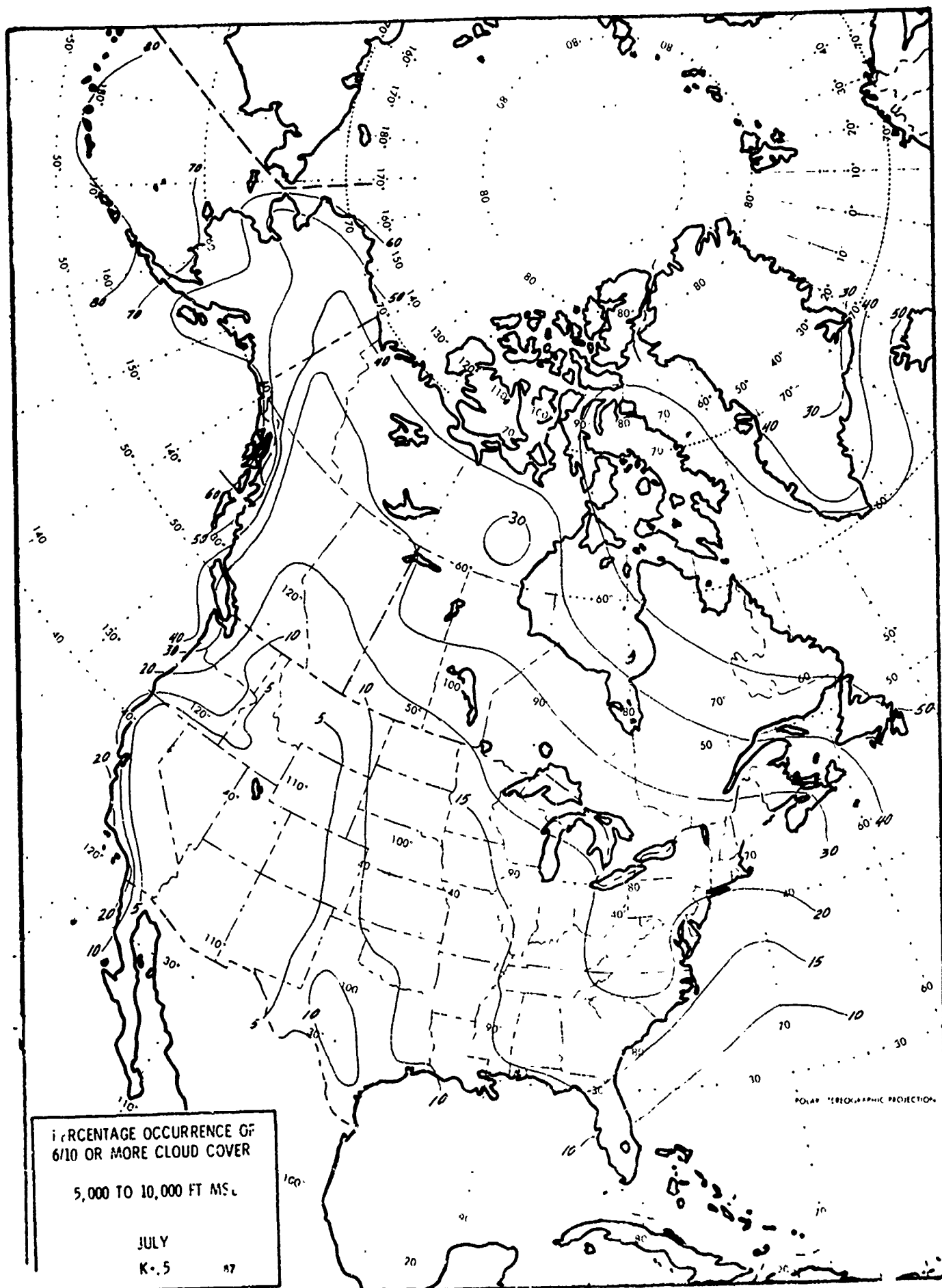
K-0

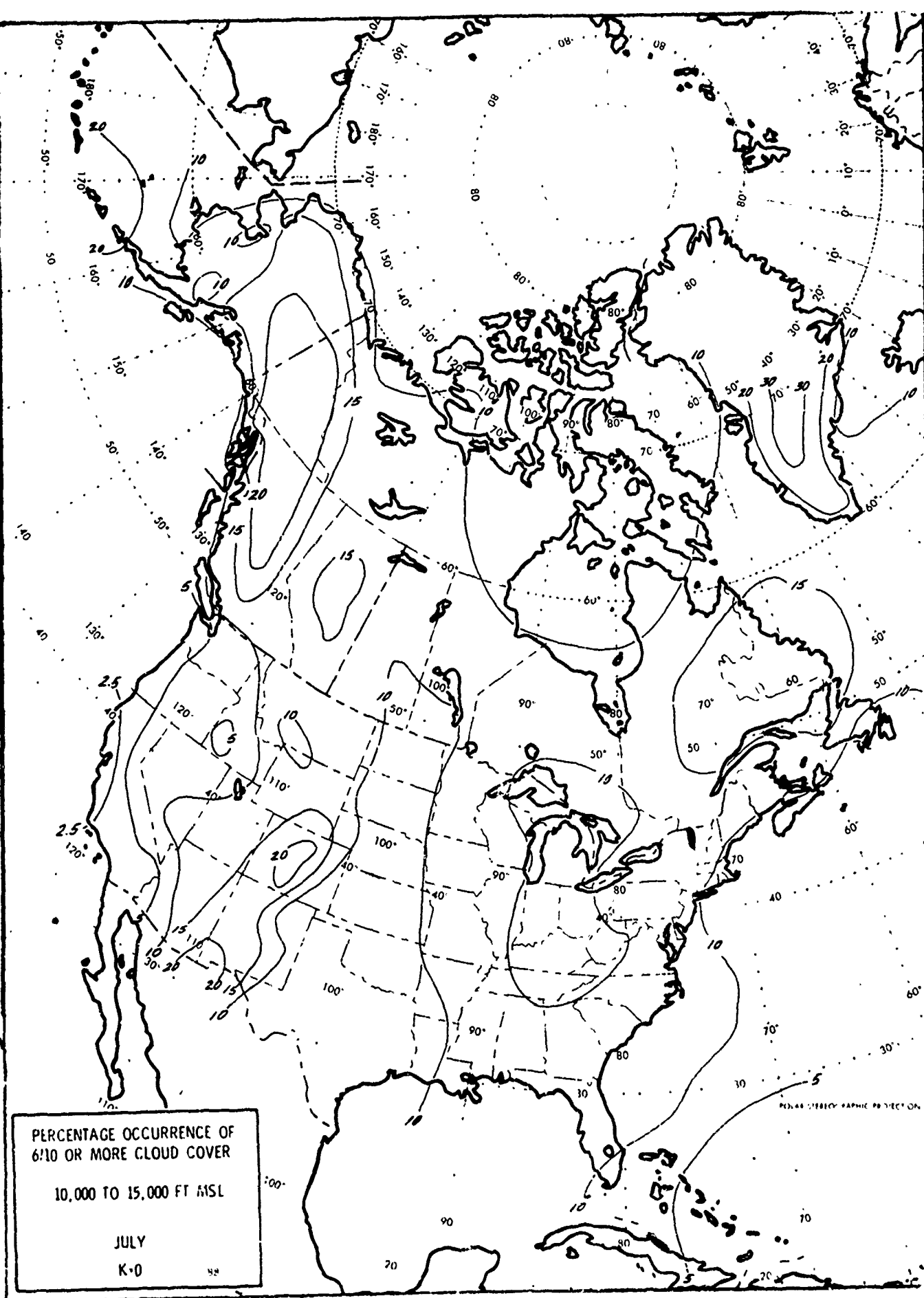
85

POLAR STEREOGRAPHIC PROJECTION

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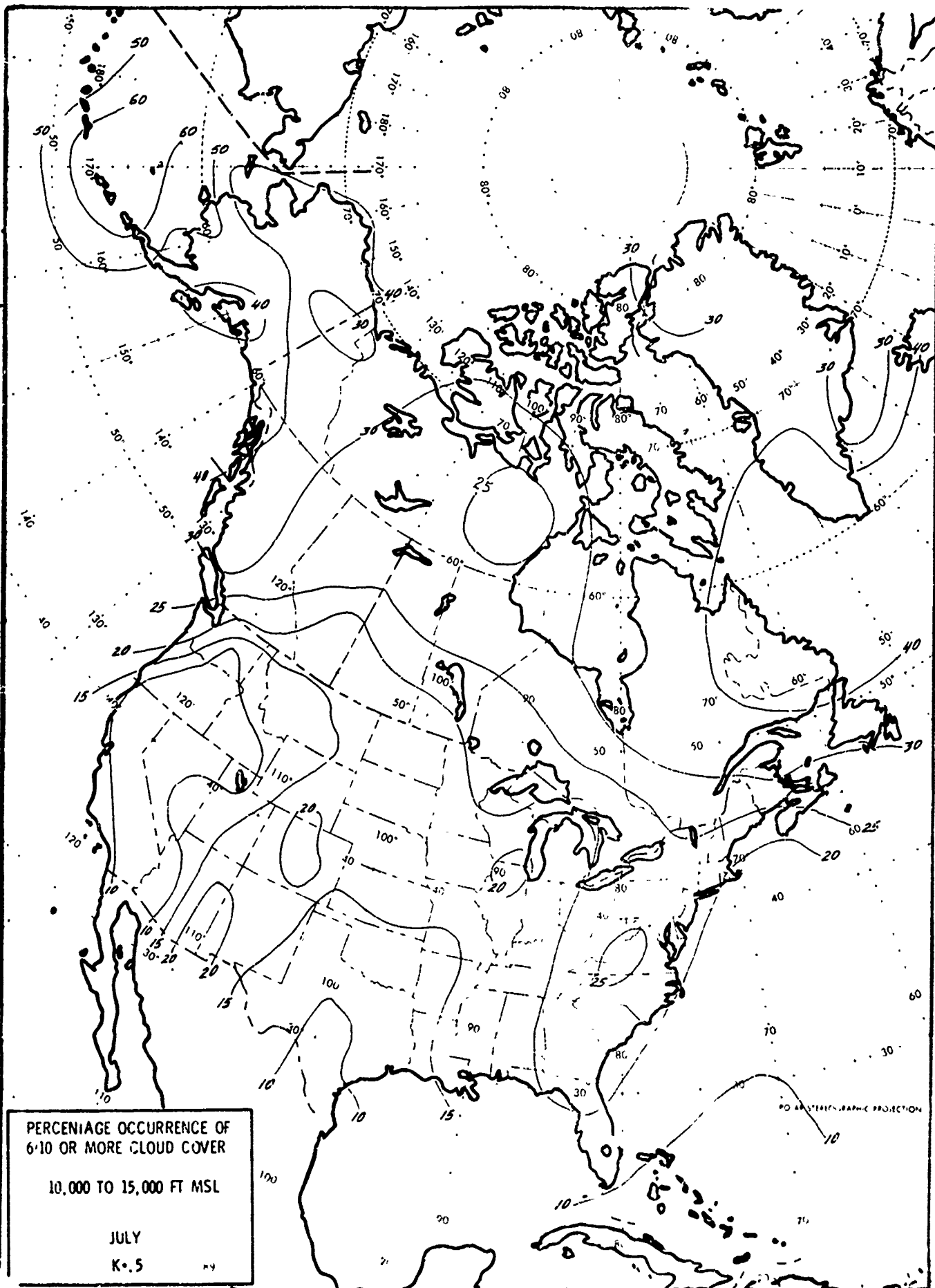
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

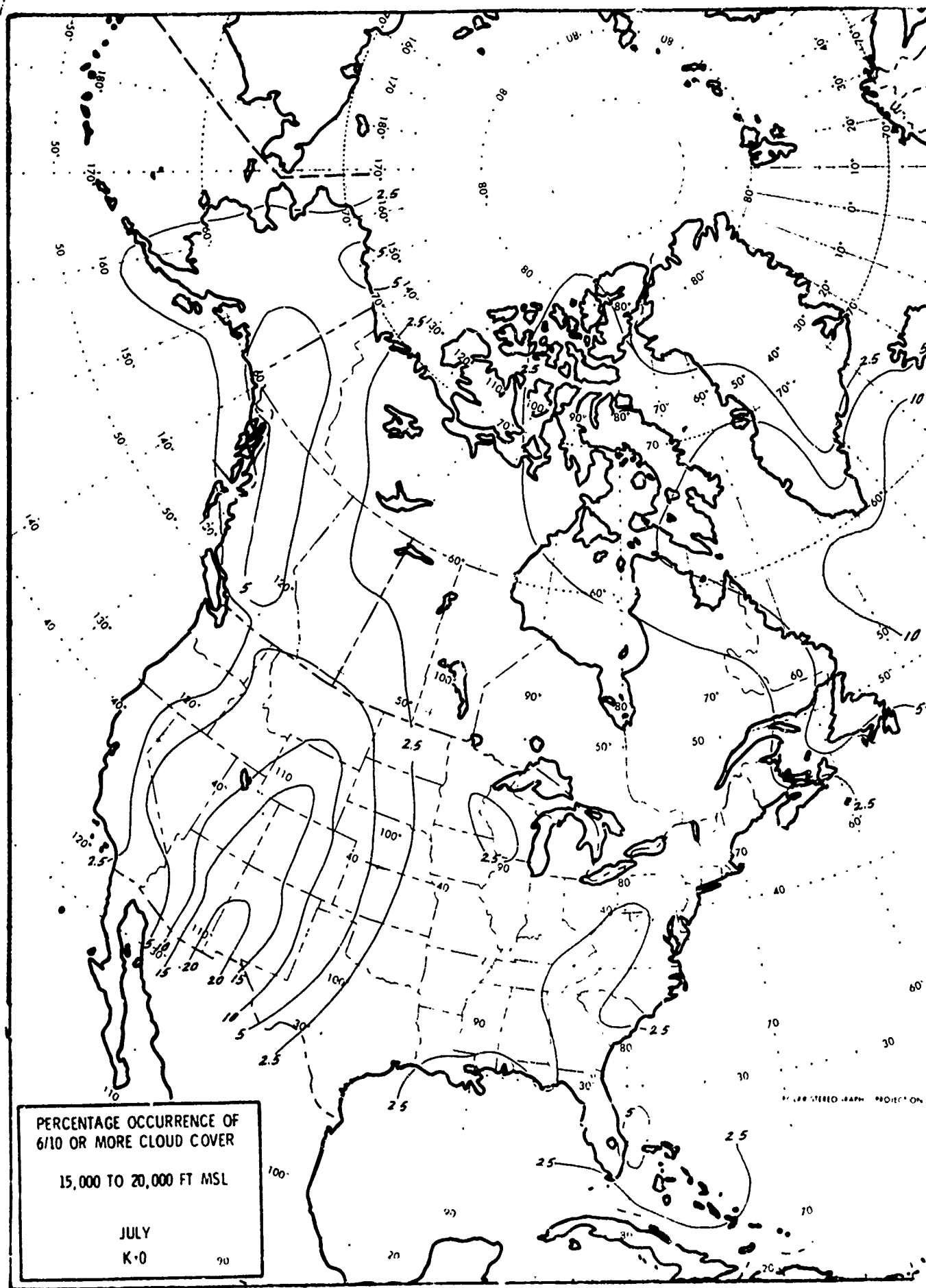
10,000 TO 15,000 FT MSL

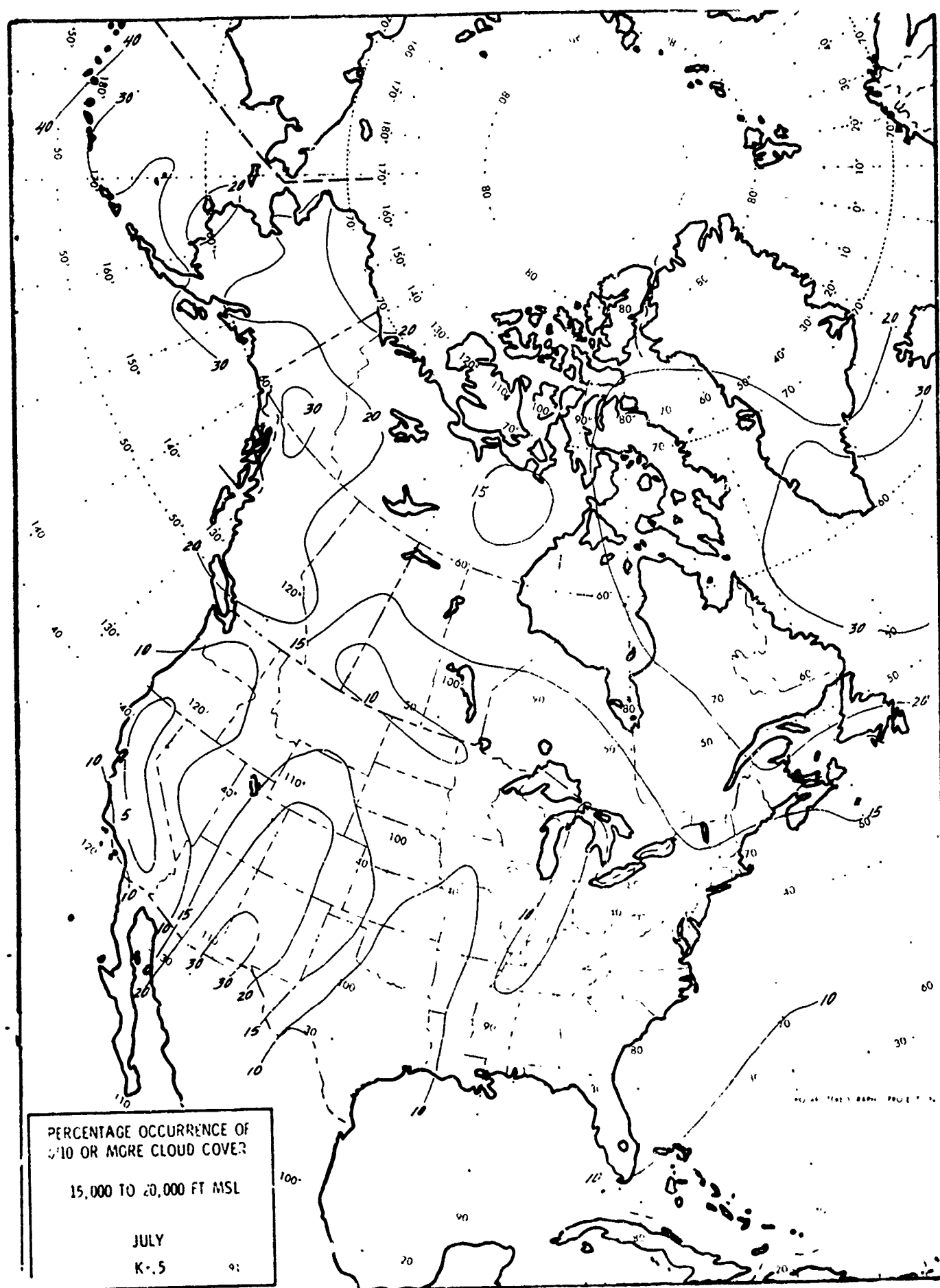
JULY

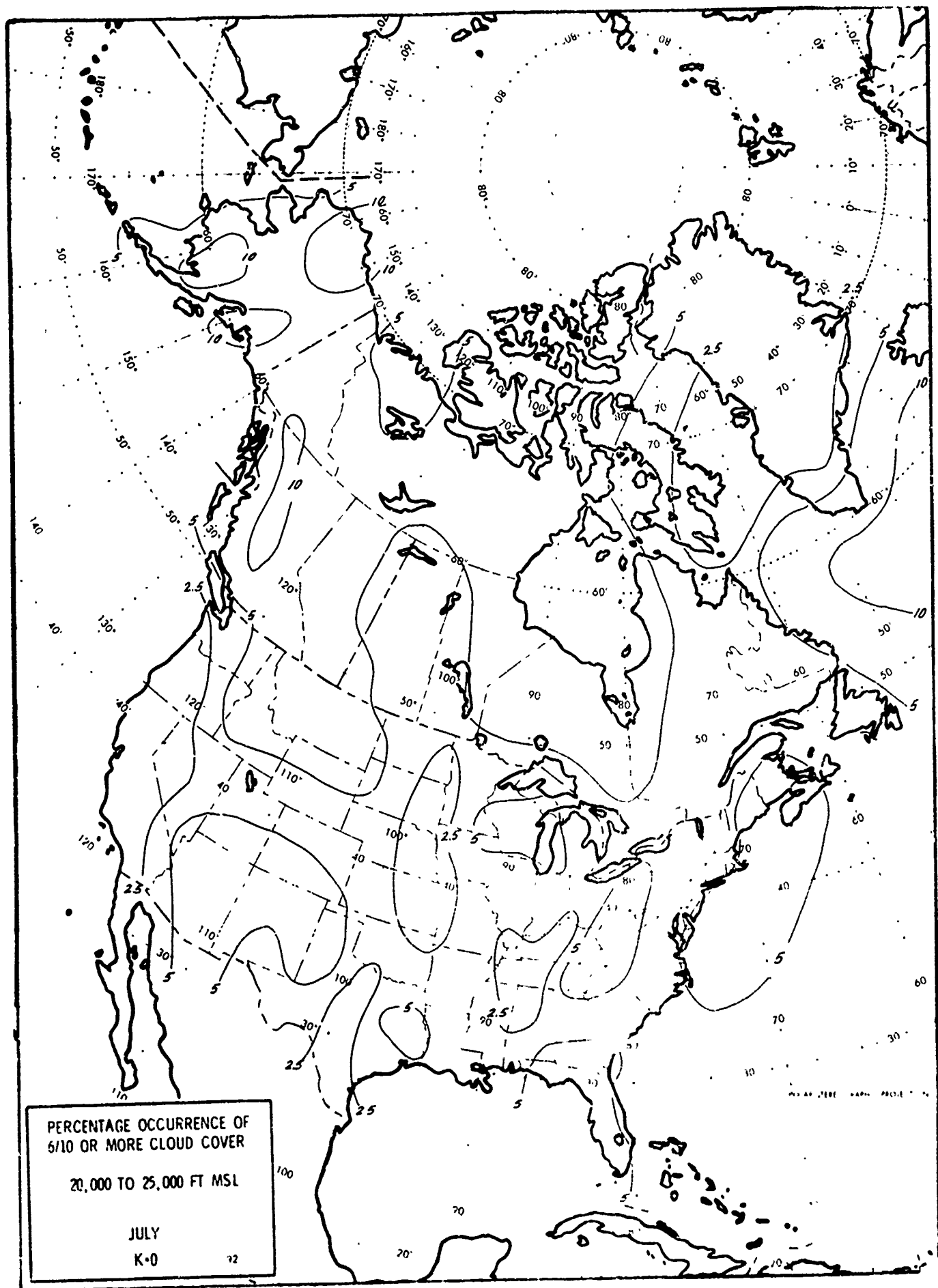
K-0

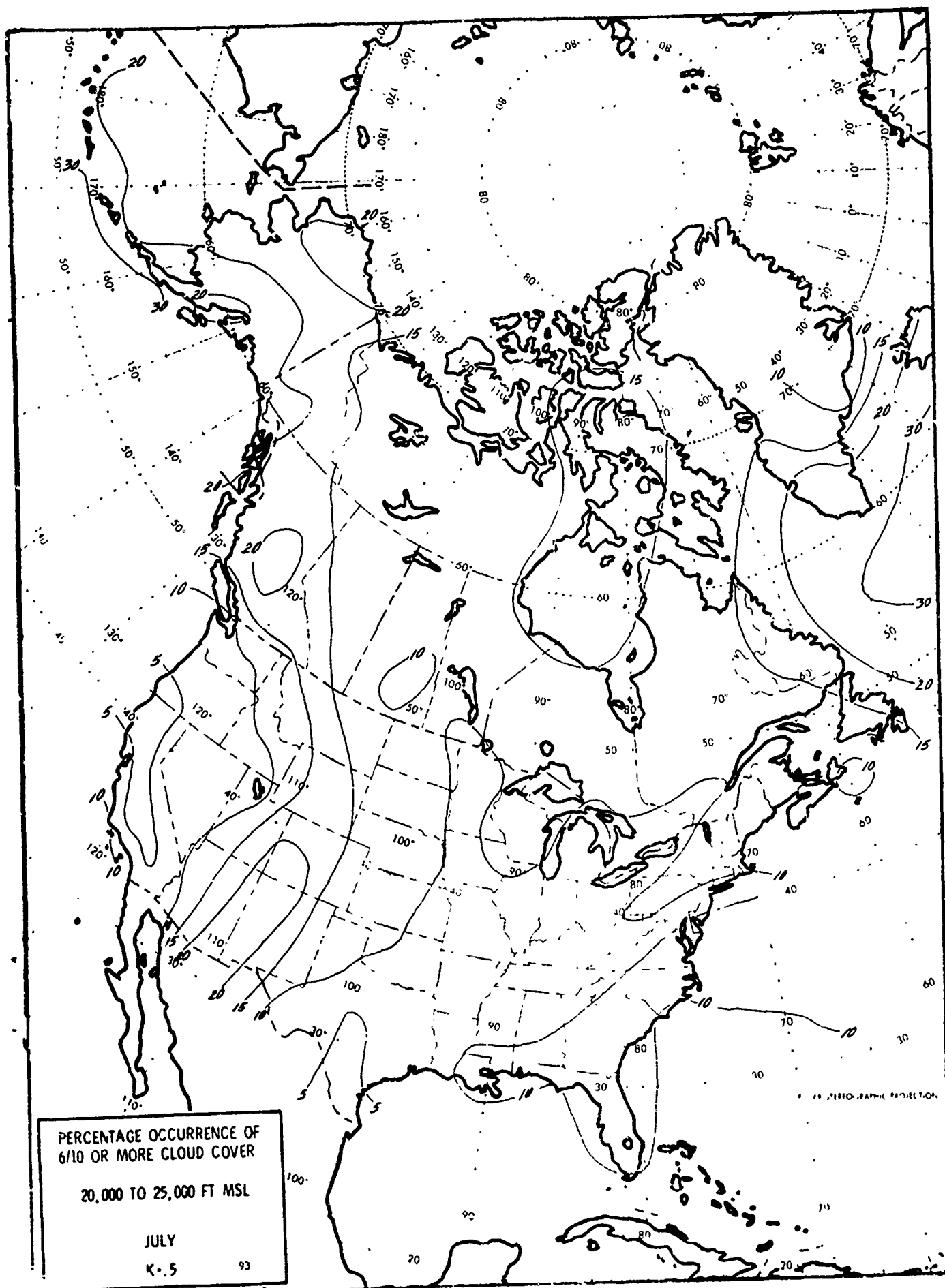
PERCENTAGE GRAPHIC PROJECTION

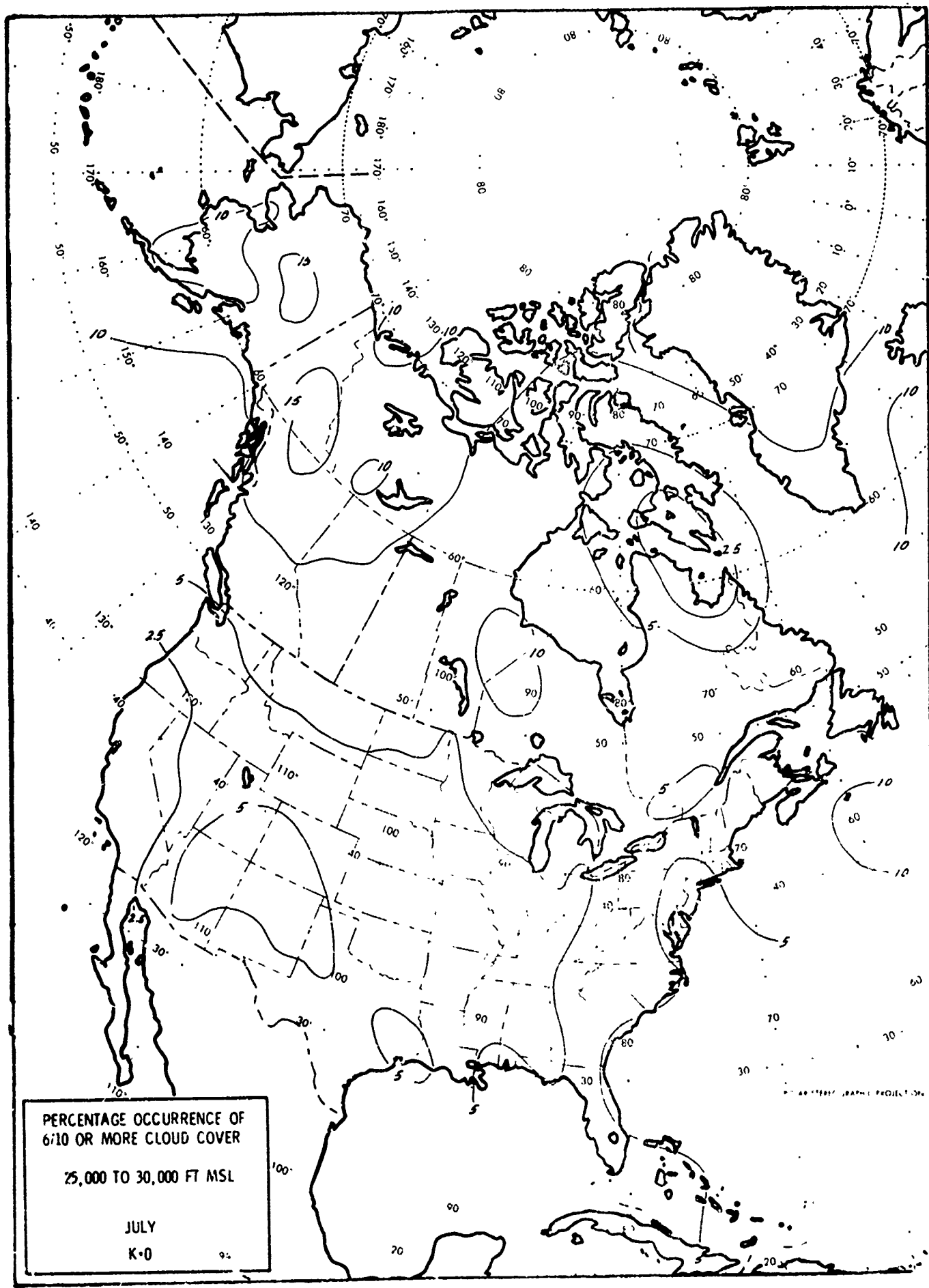


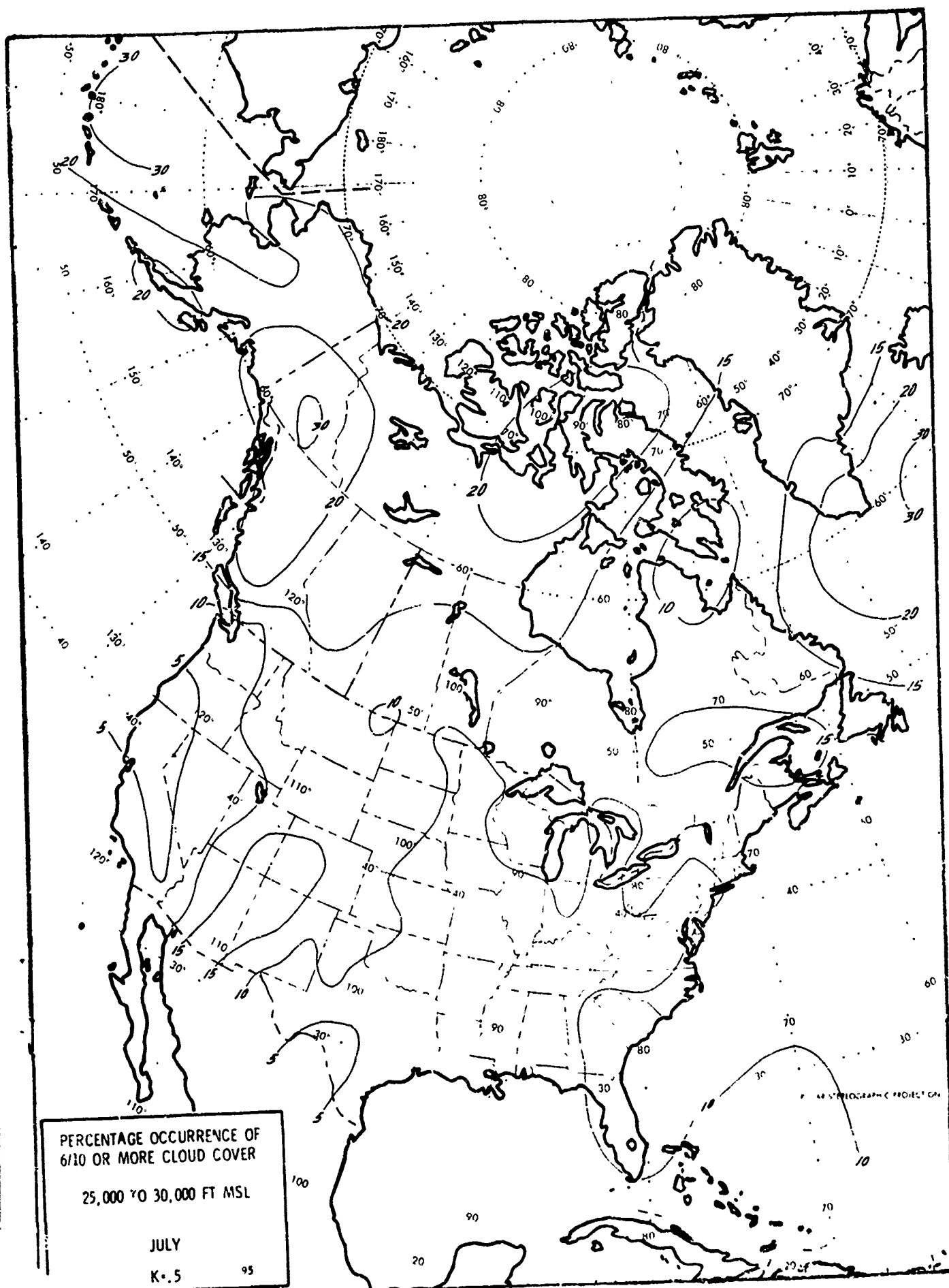






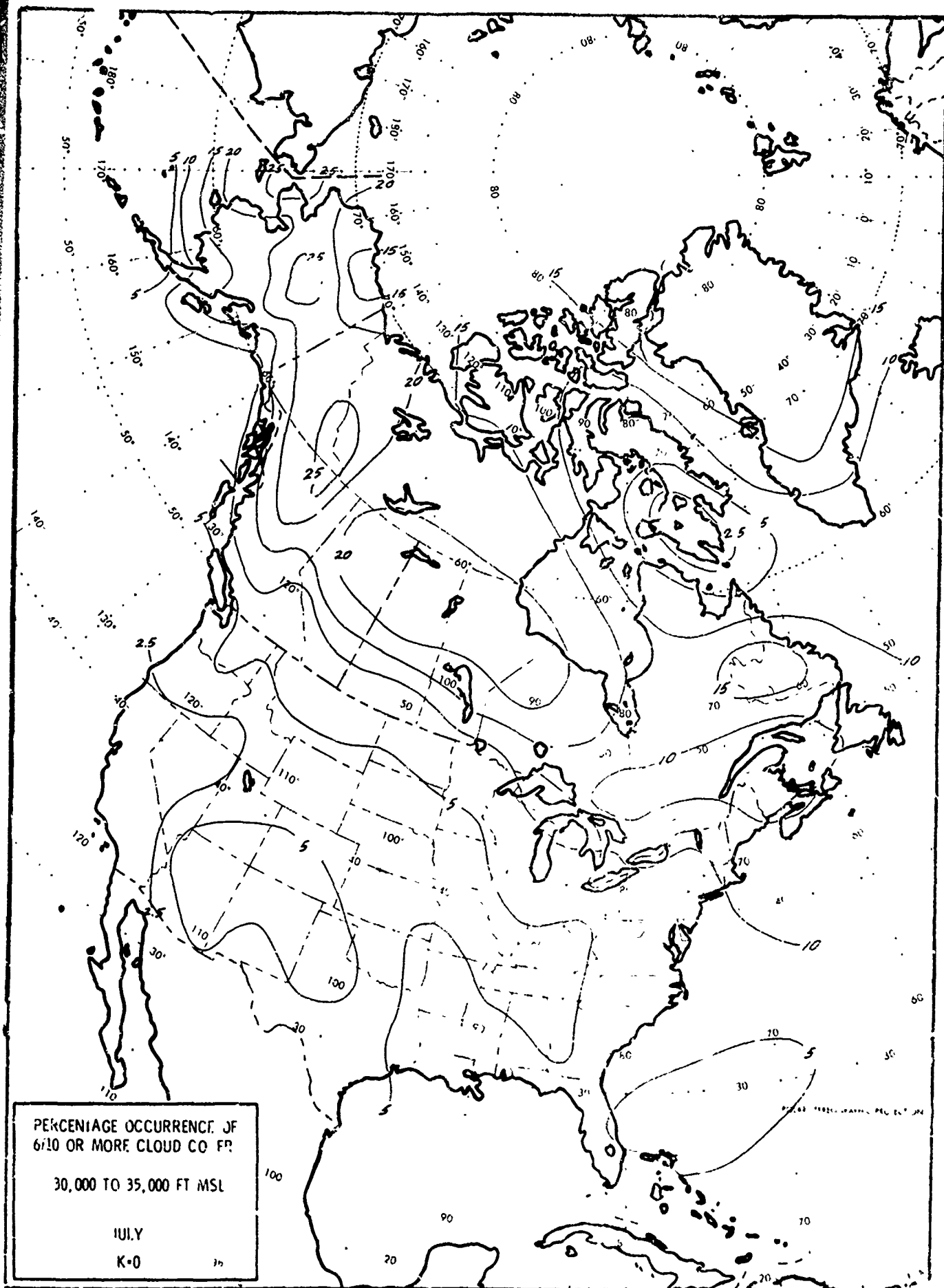


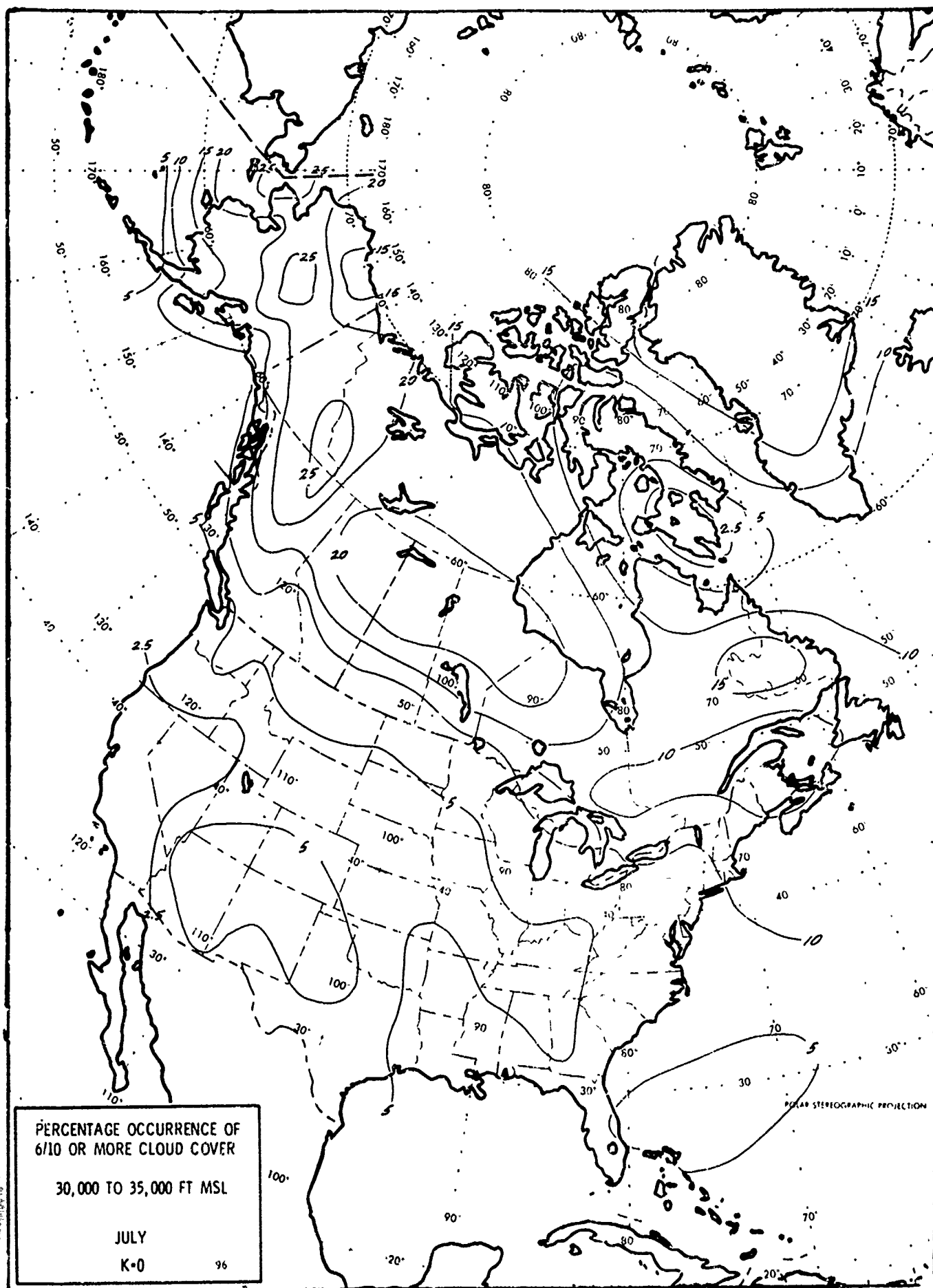


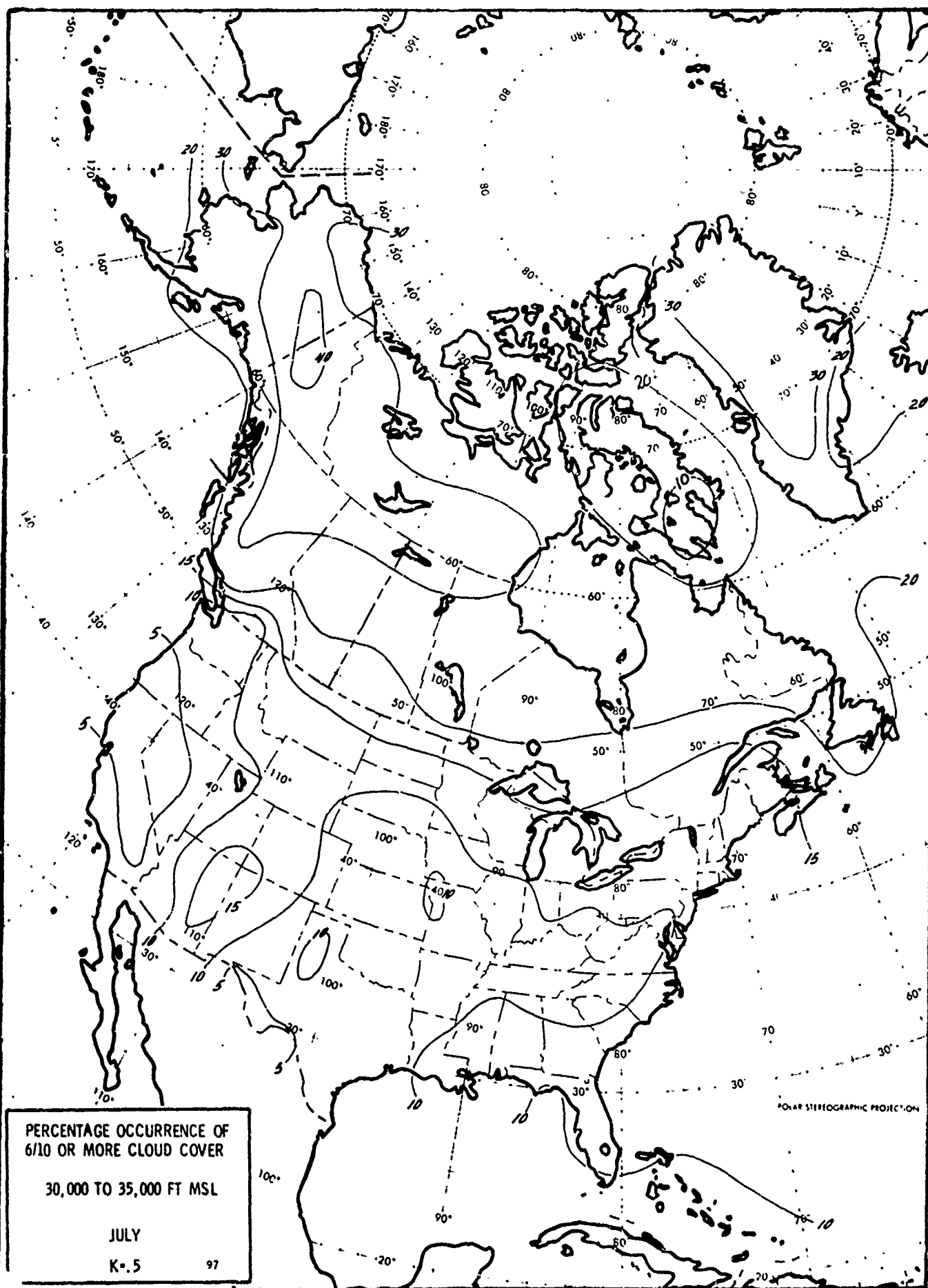


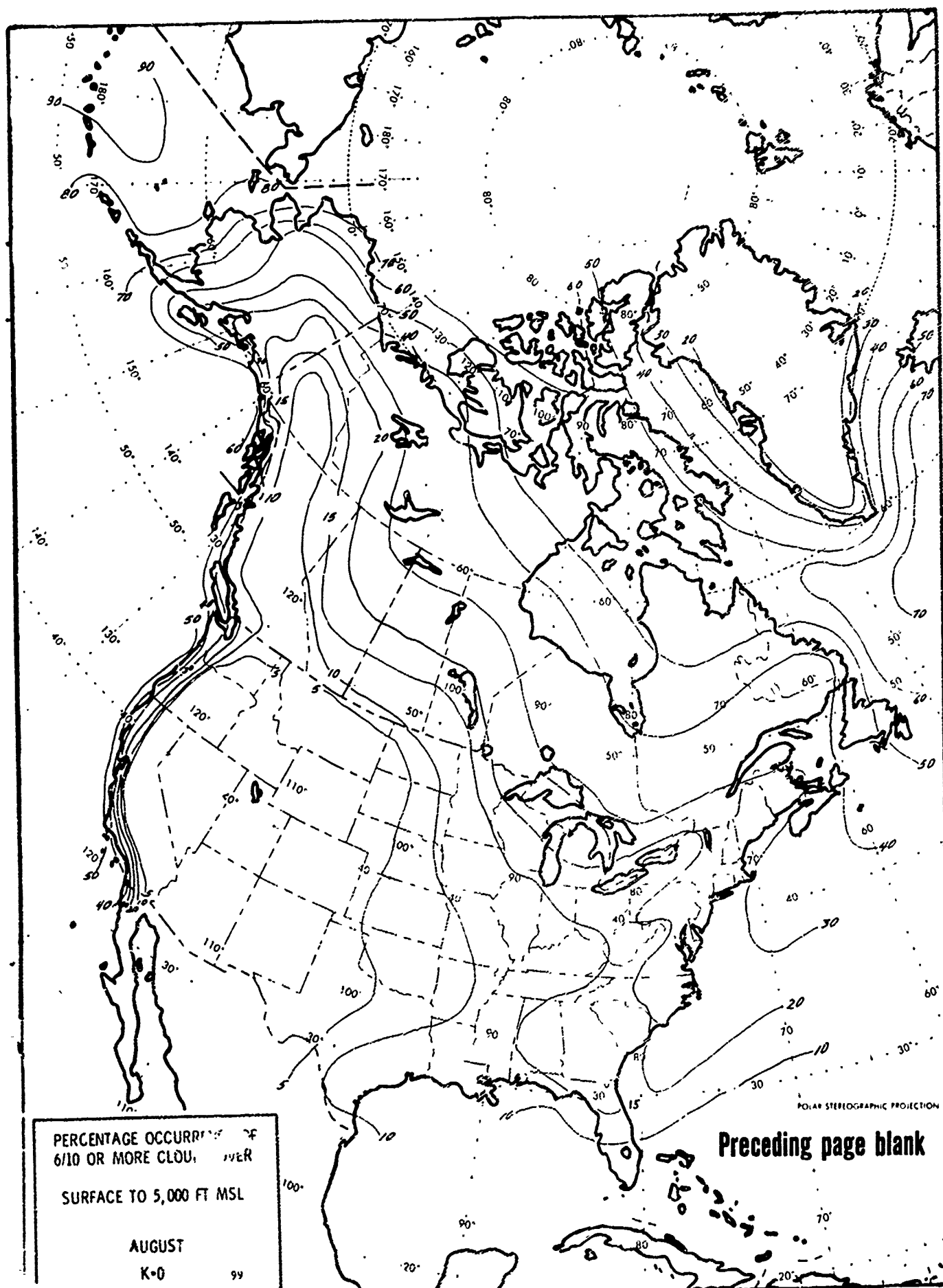
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER
25,000 TO 30,000 FT MSL
JULY
K=5 95

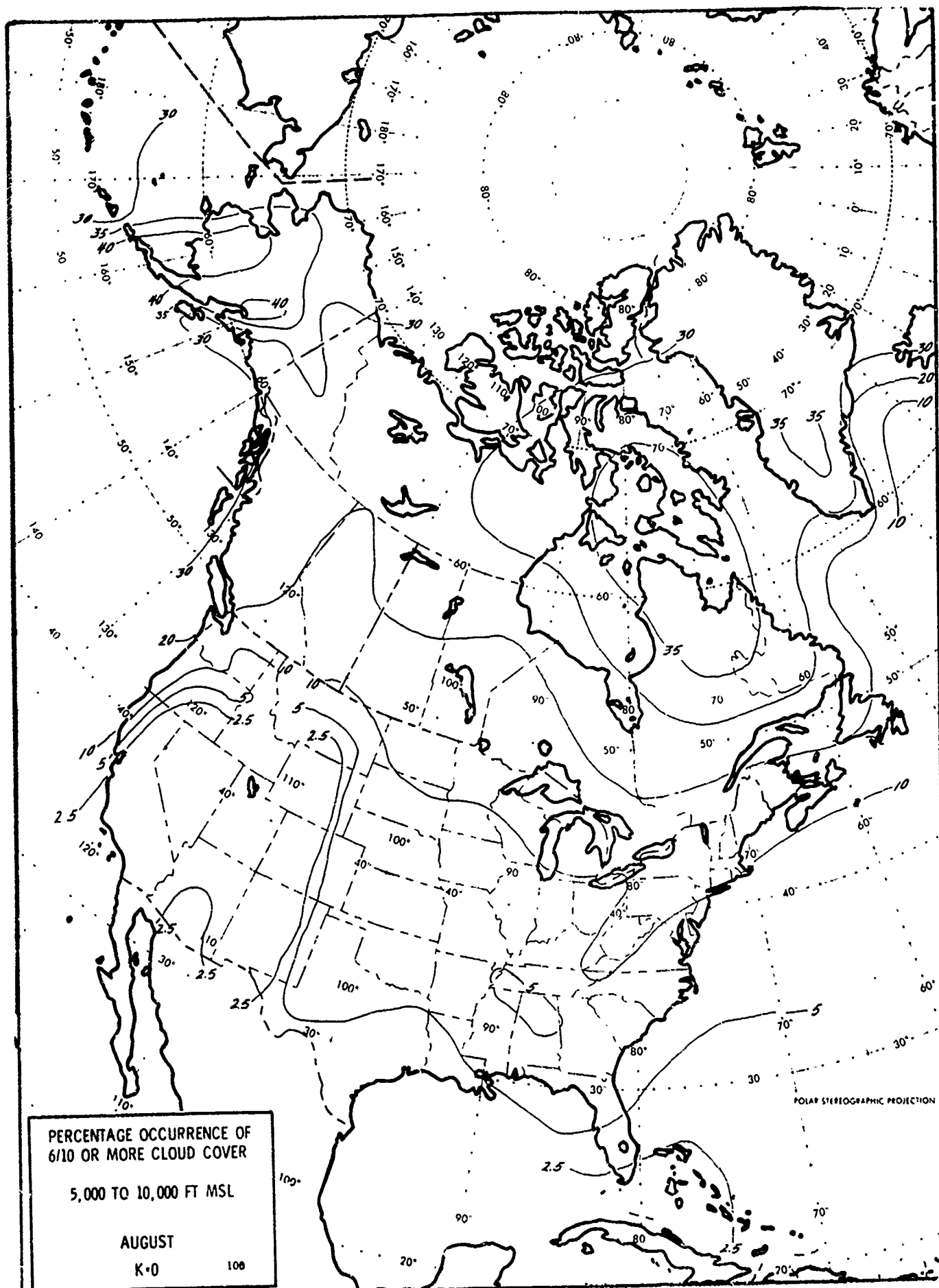
AS SYNOPTIC GRAPHIC PROJECT CASE











PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

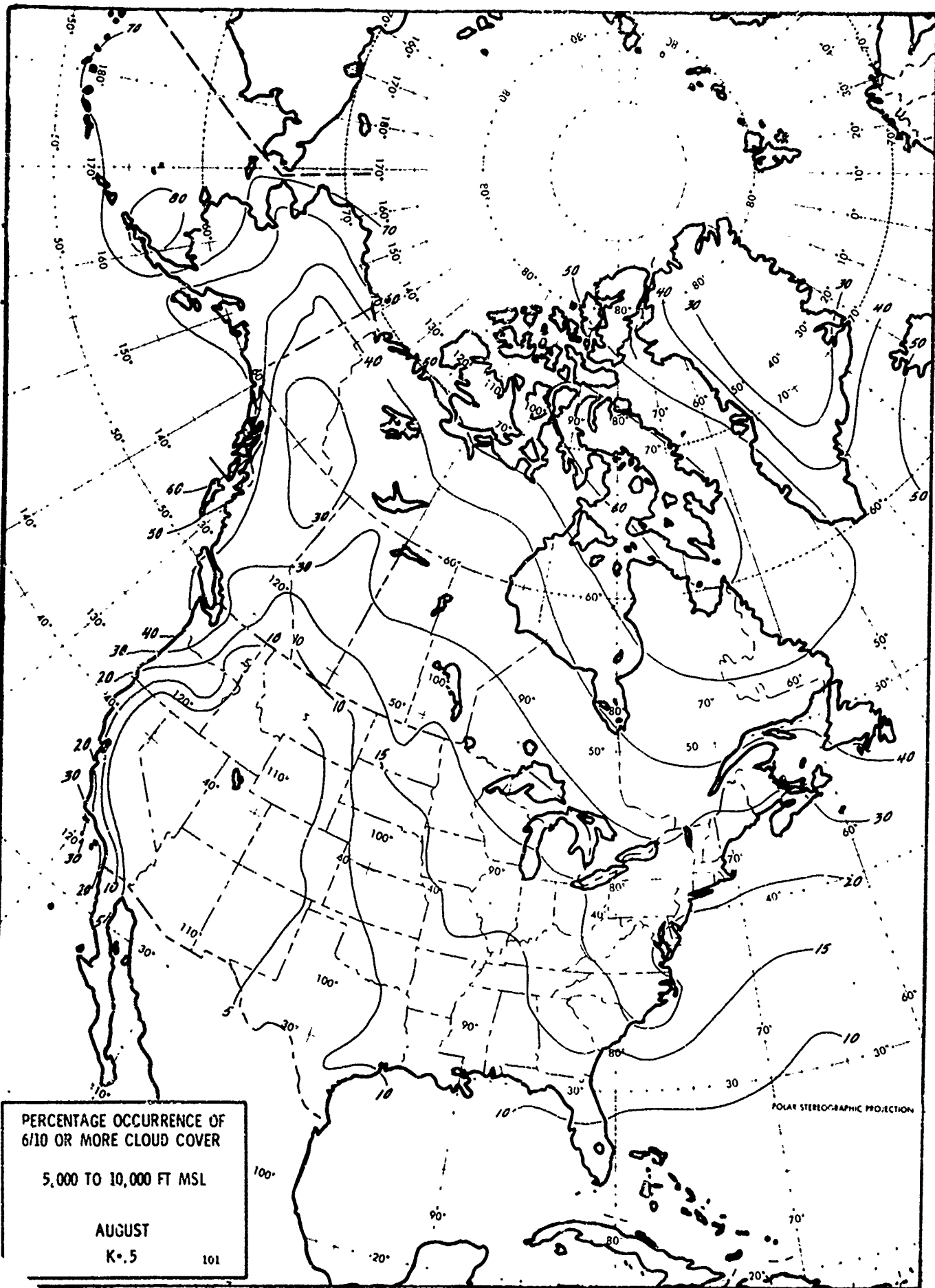
5,000 TO 10,000 FT MSL

AUGUST

K-0

100

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

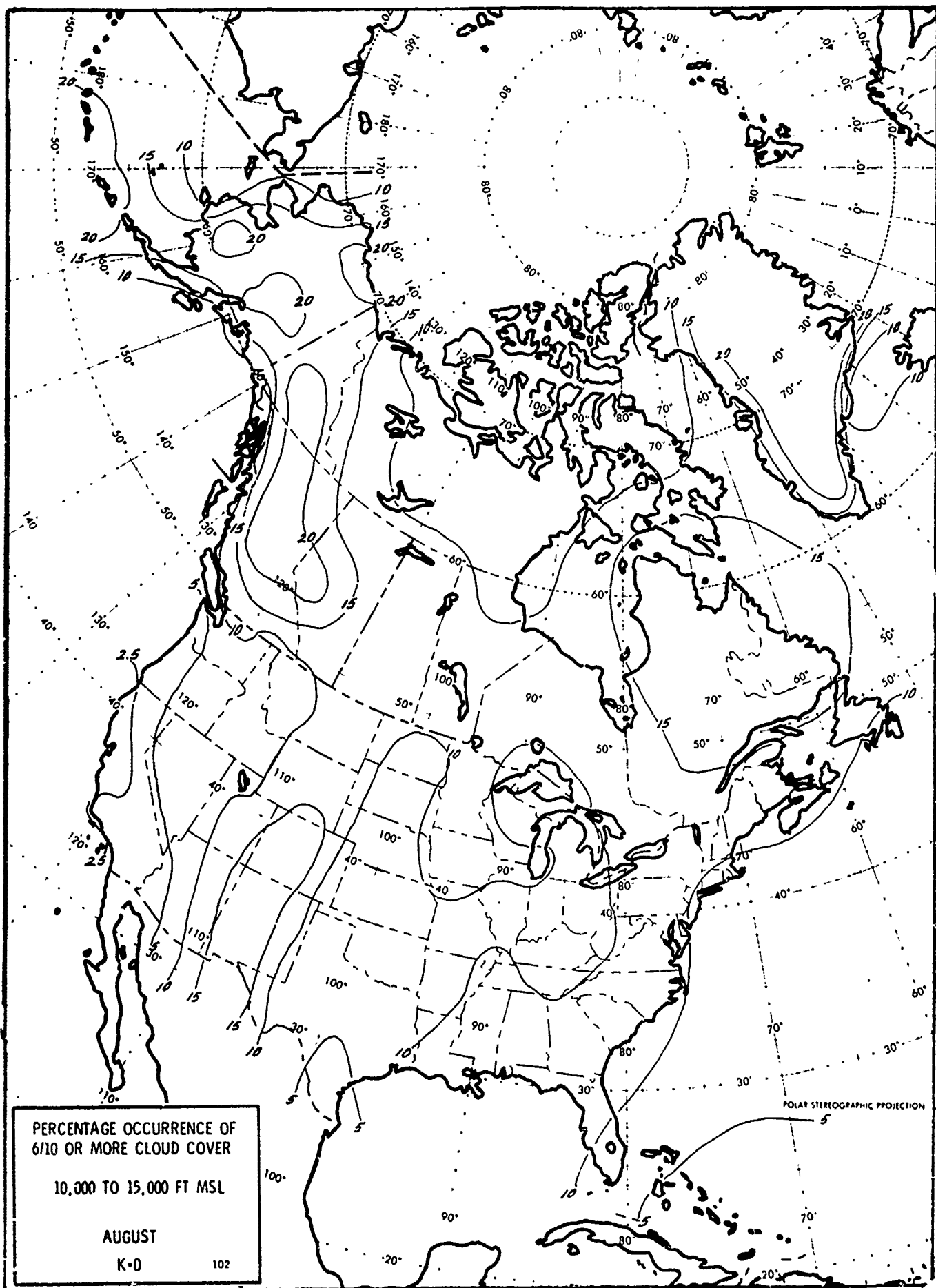
5,000 TO 10,000 FT MSL

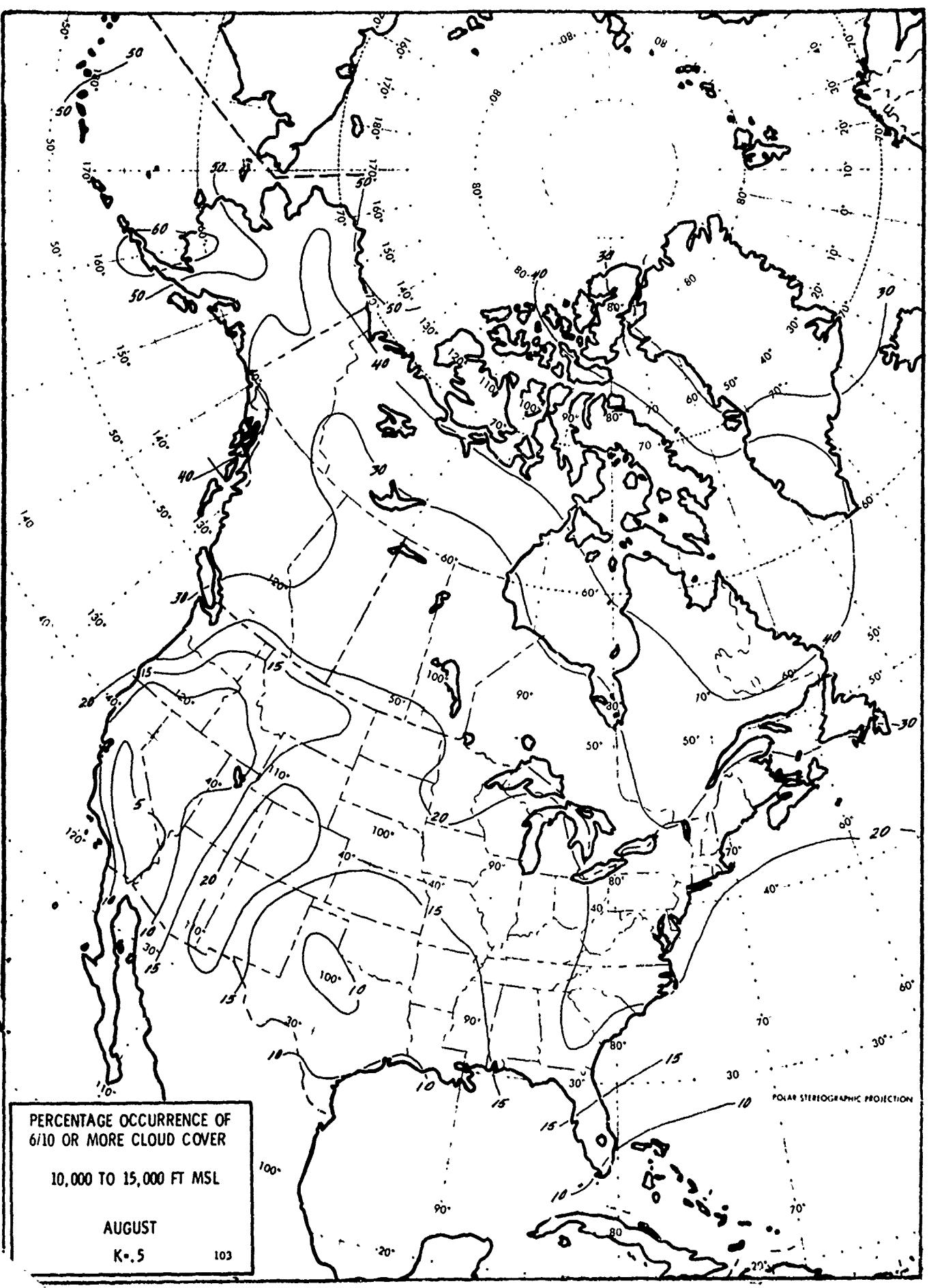
AUGUST

K.5

101

POLAR STEREOGRAPHIC PROJECTION





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

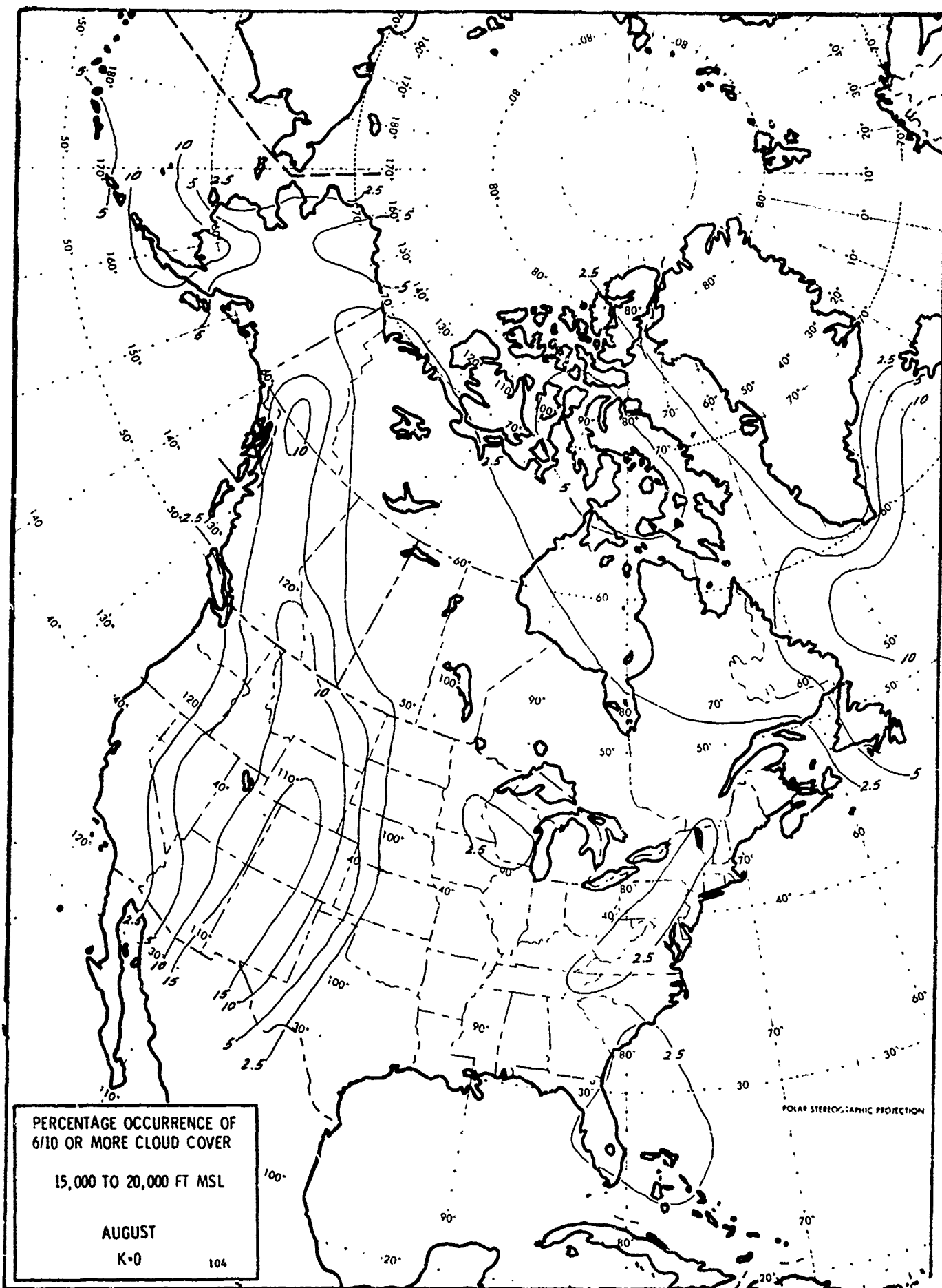
10,000 TO 15,000 FT MSL

AUGUST

K-5

103

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

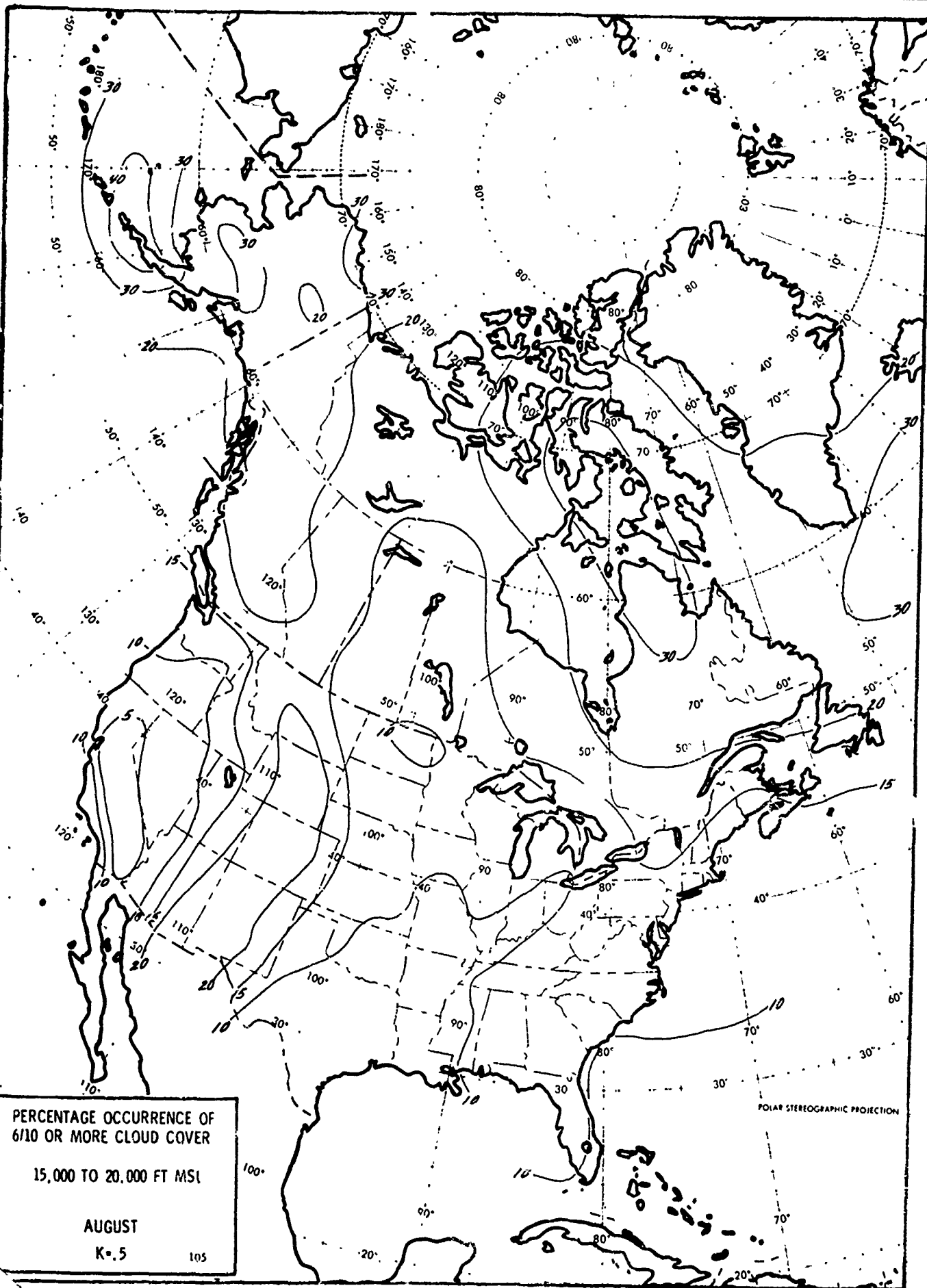
15,000 TO 20,000 FT MSI

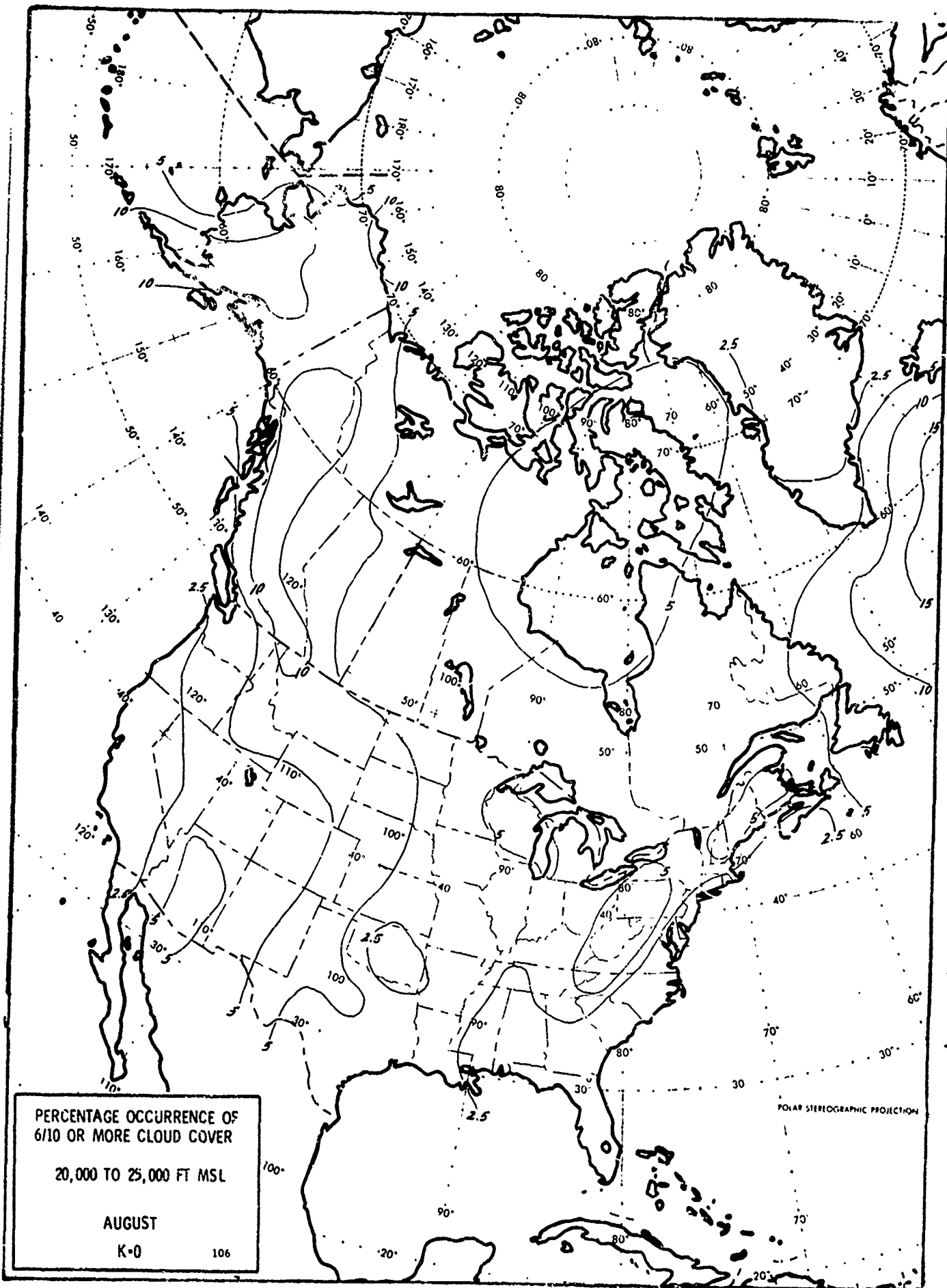
AUGUST

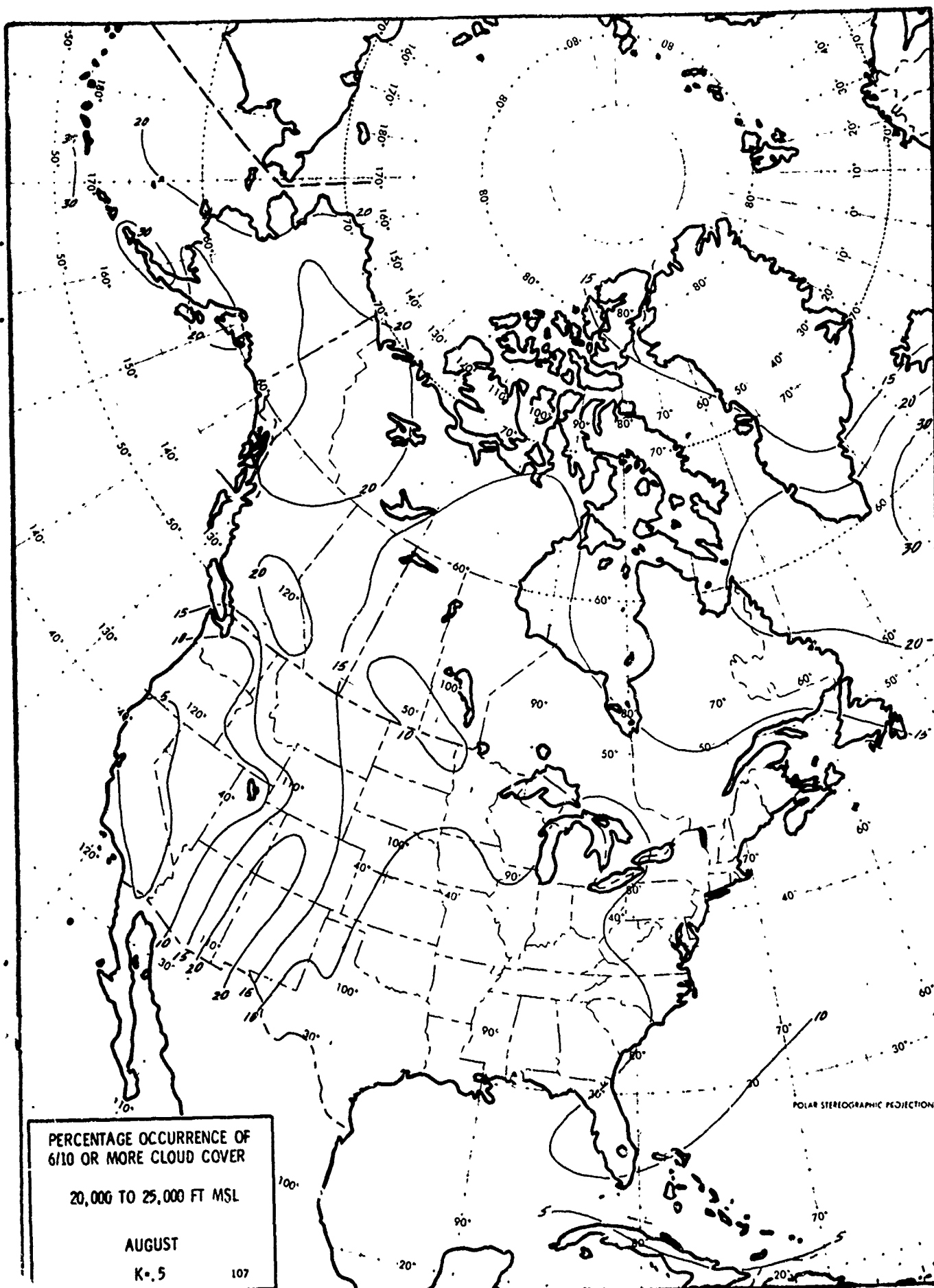
K=.5

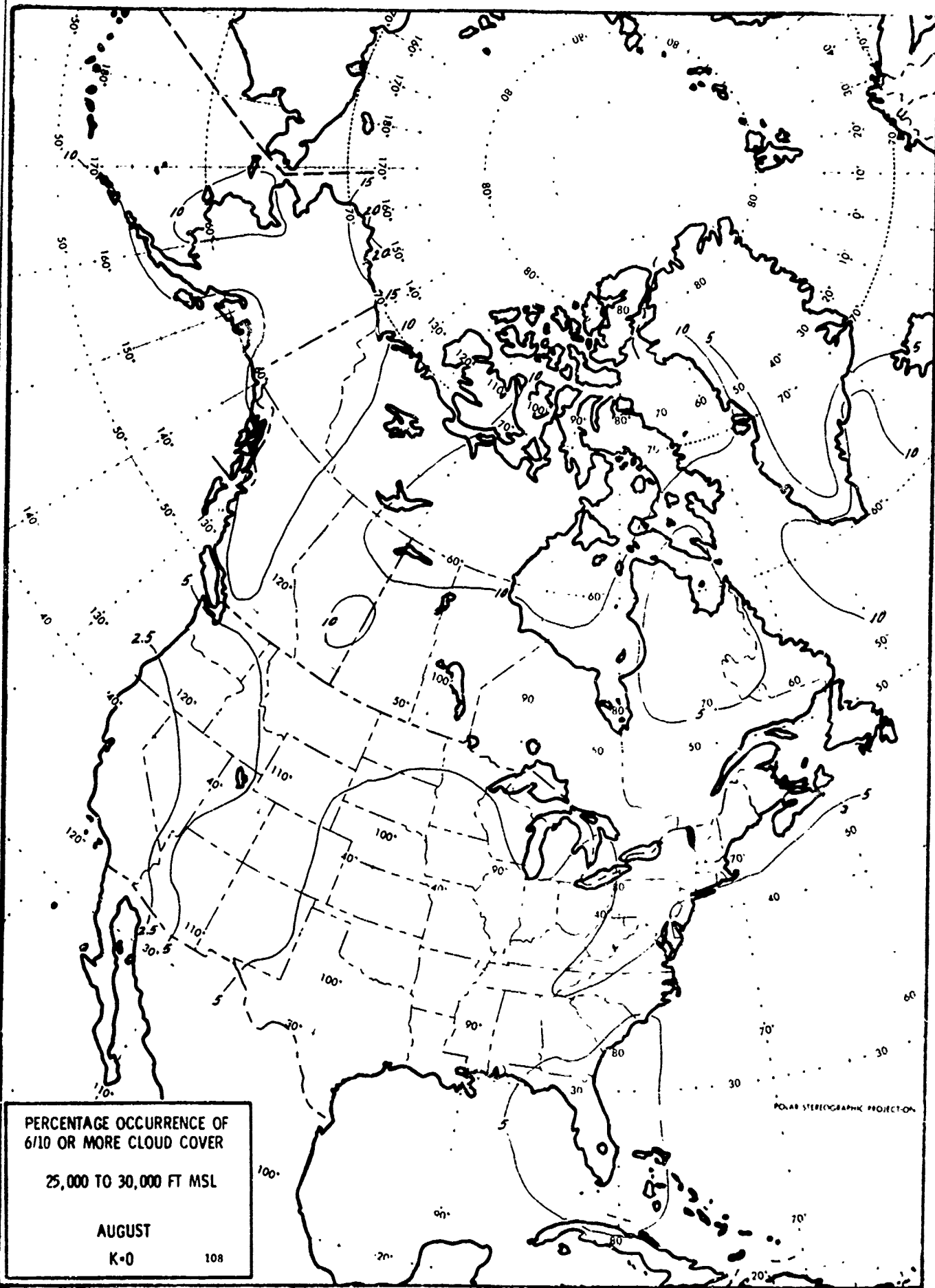
105

POLAR STEREOGRAPHIC PROJECTION



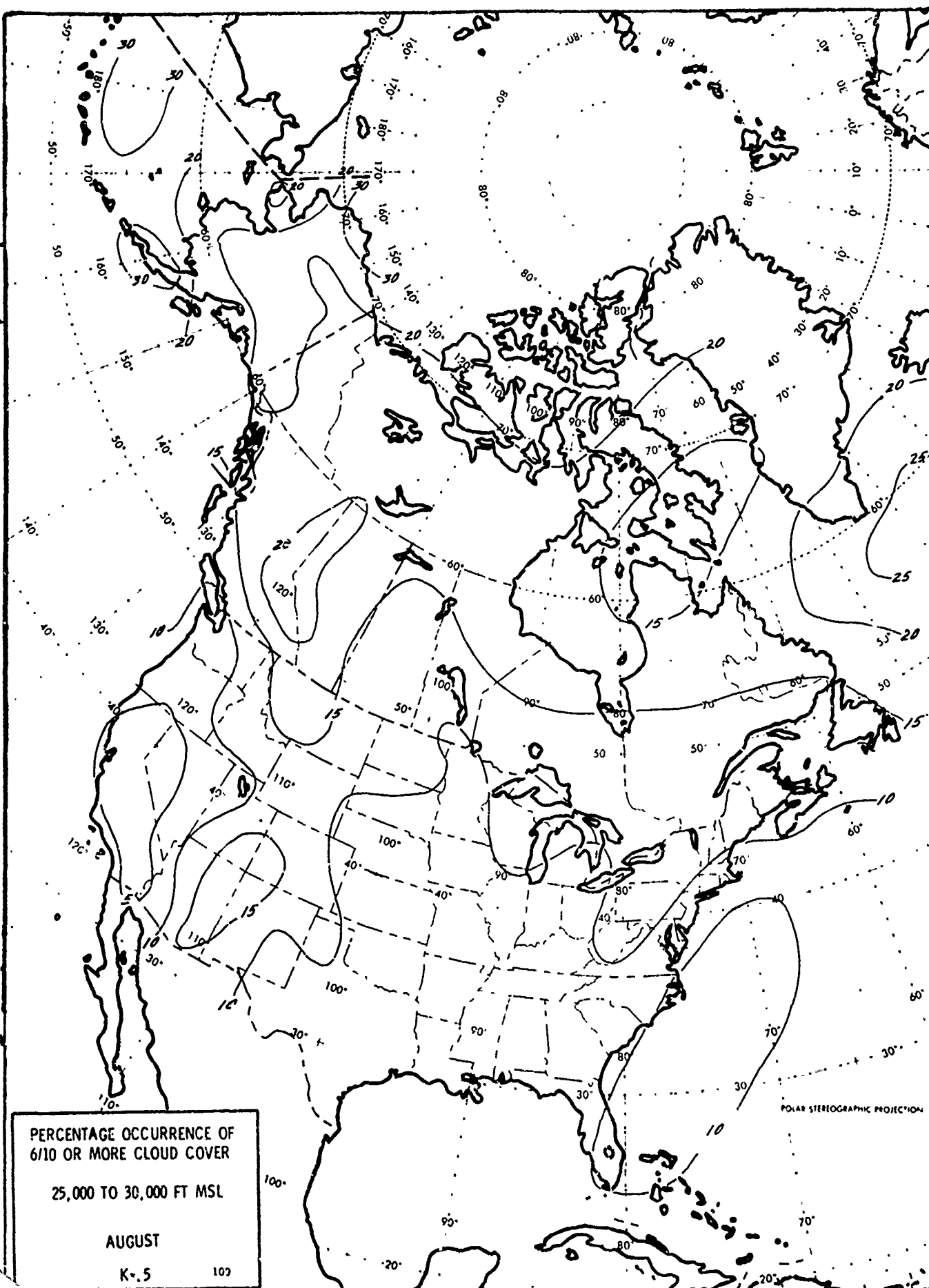


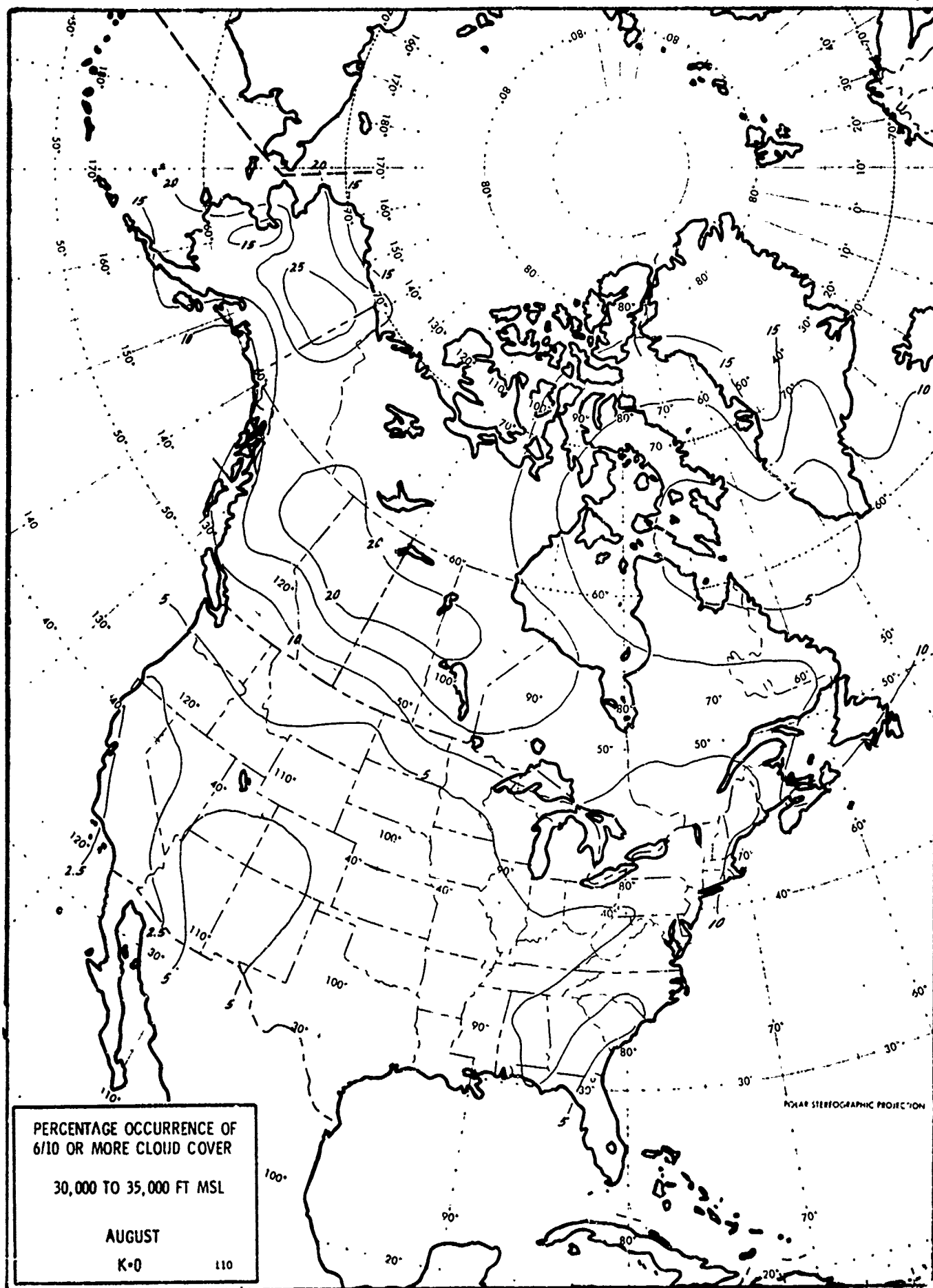


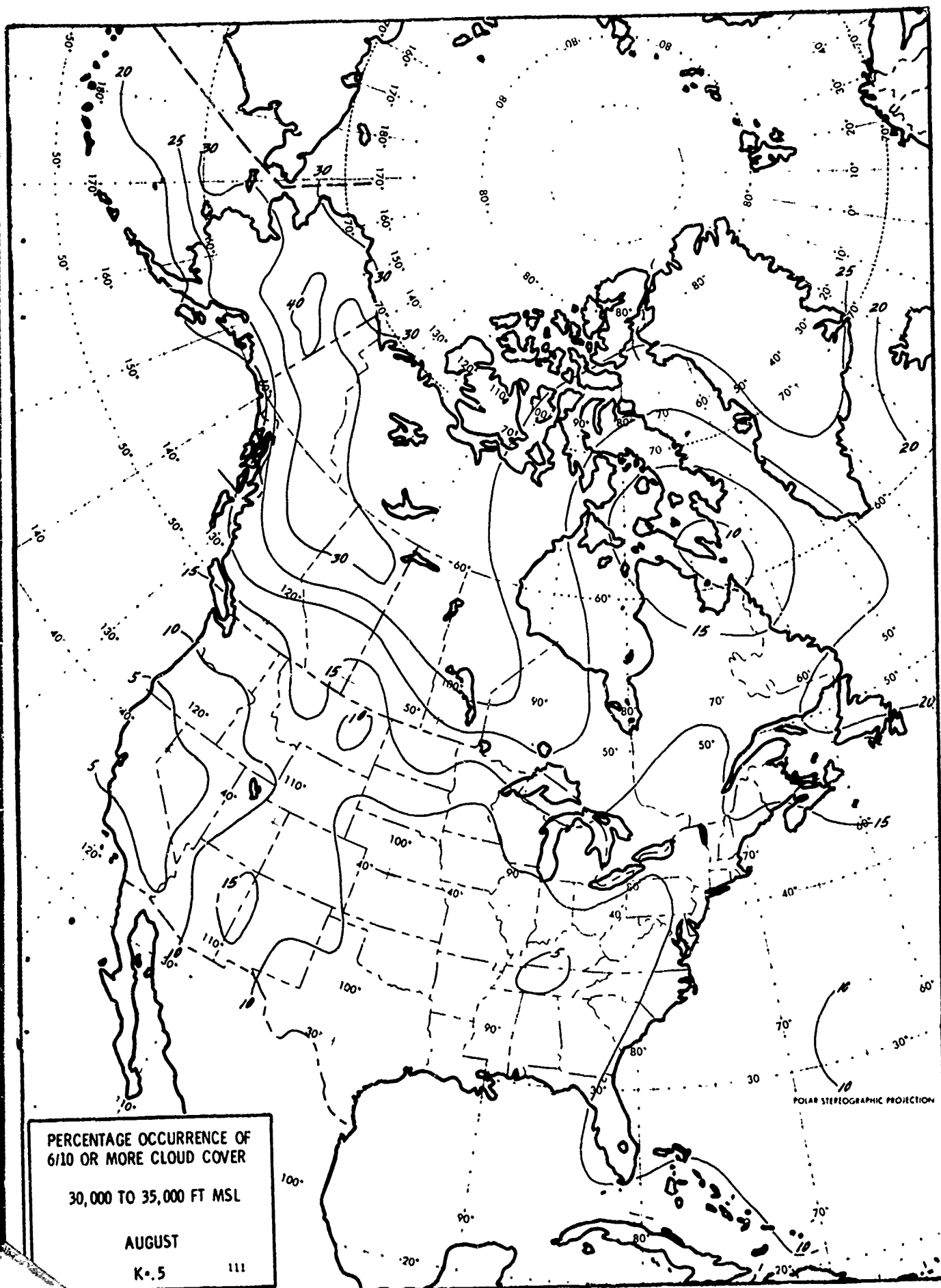


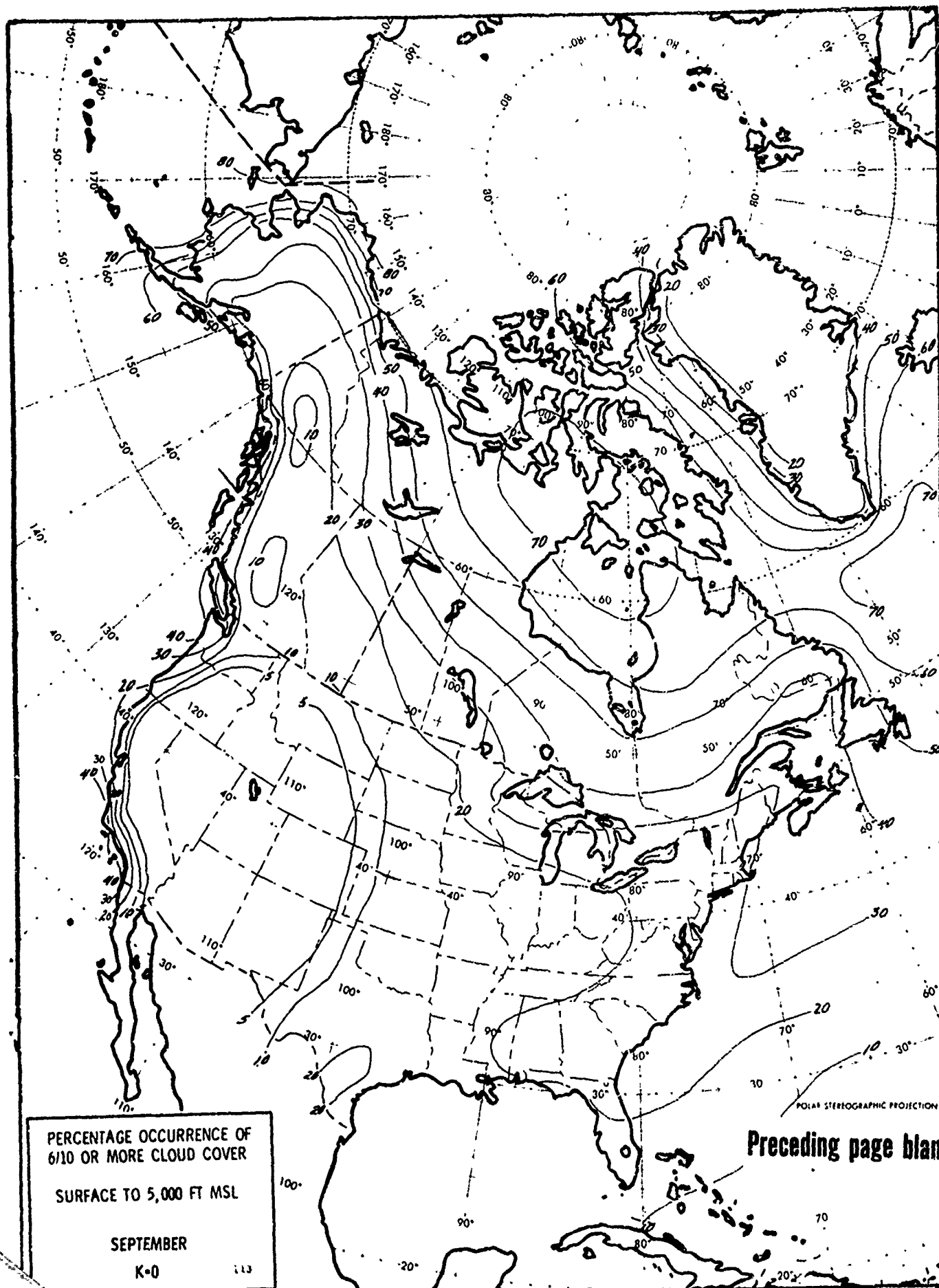
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER
25,000 TO 30,000 FT MSL
AUGUST
K-0 108

POLAR STEREOGRAPHIC PROJECTION









PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

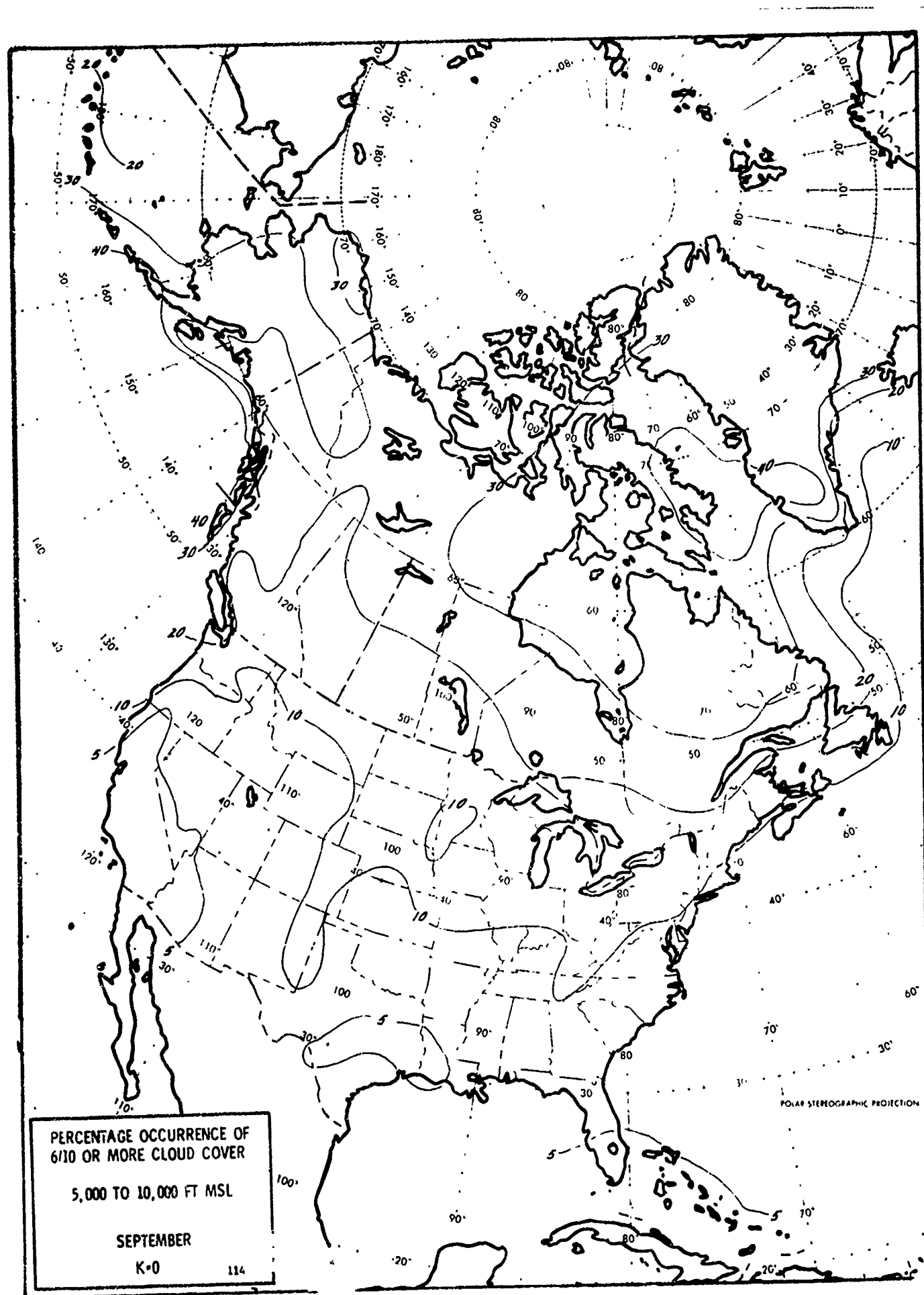
SURFACE TO 5,000 FT MSL

SEPTEMBER

K-0

113

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

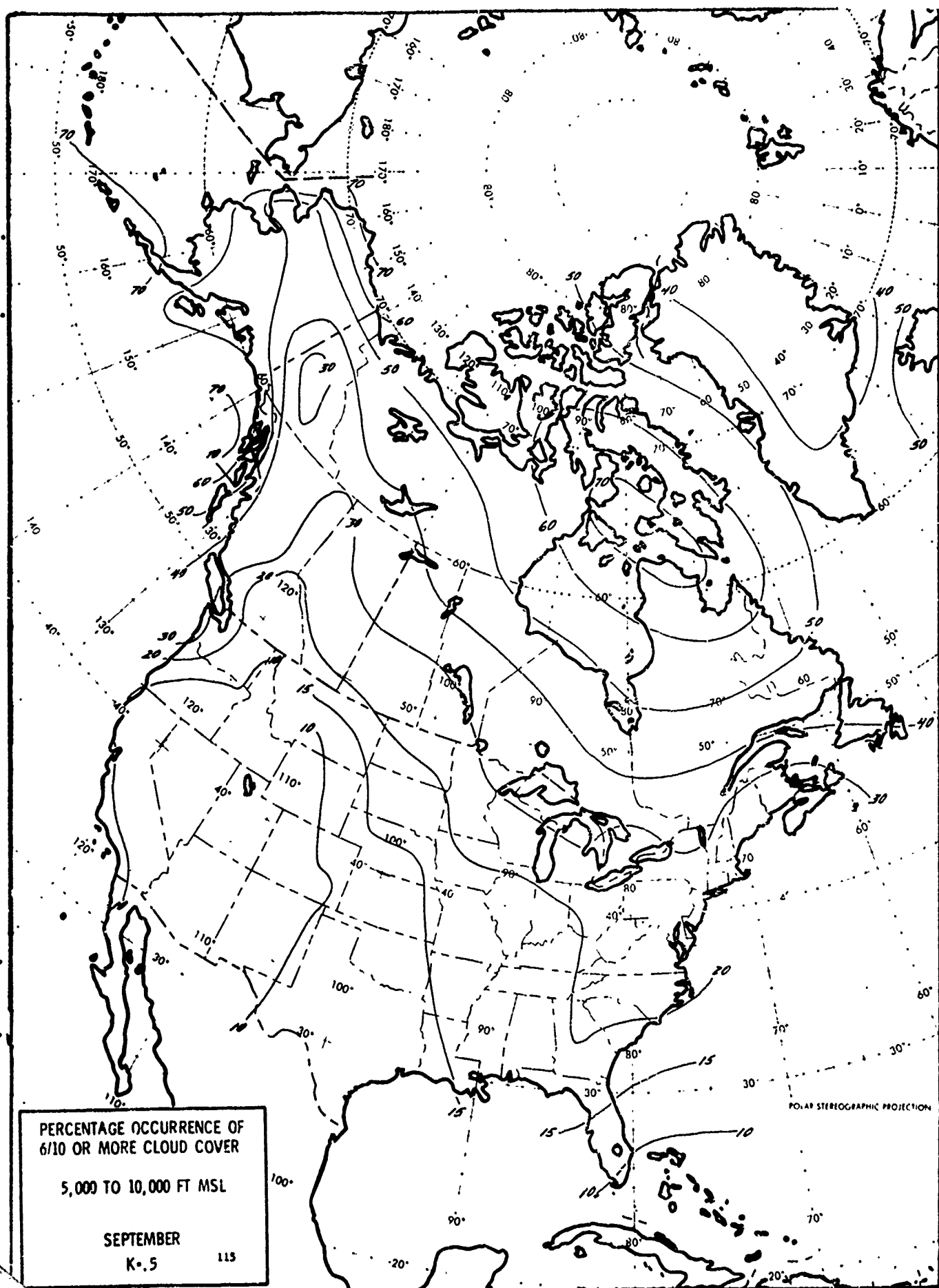
5,000 TO 10,000 FT MSL

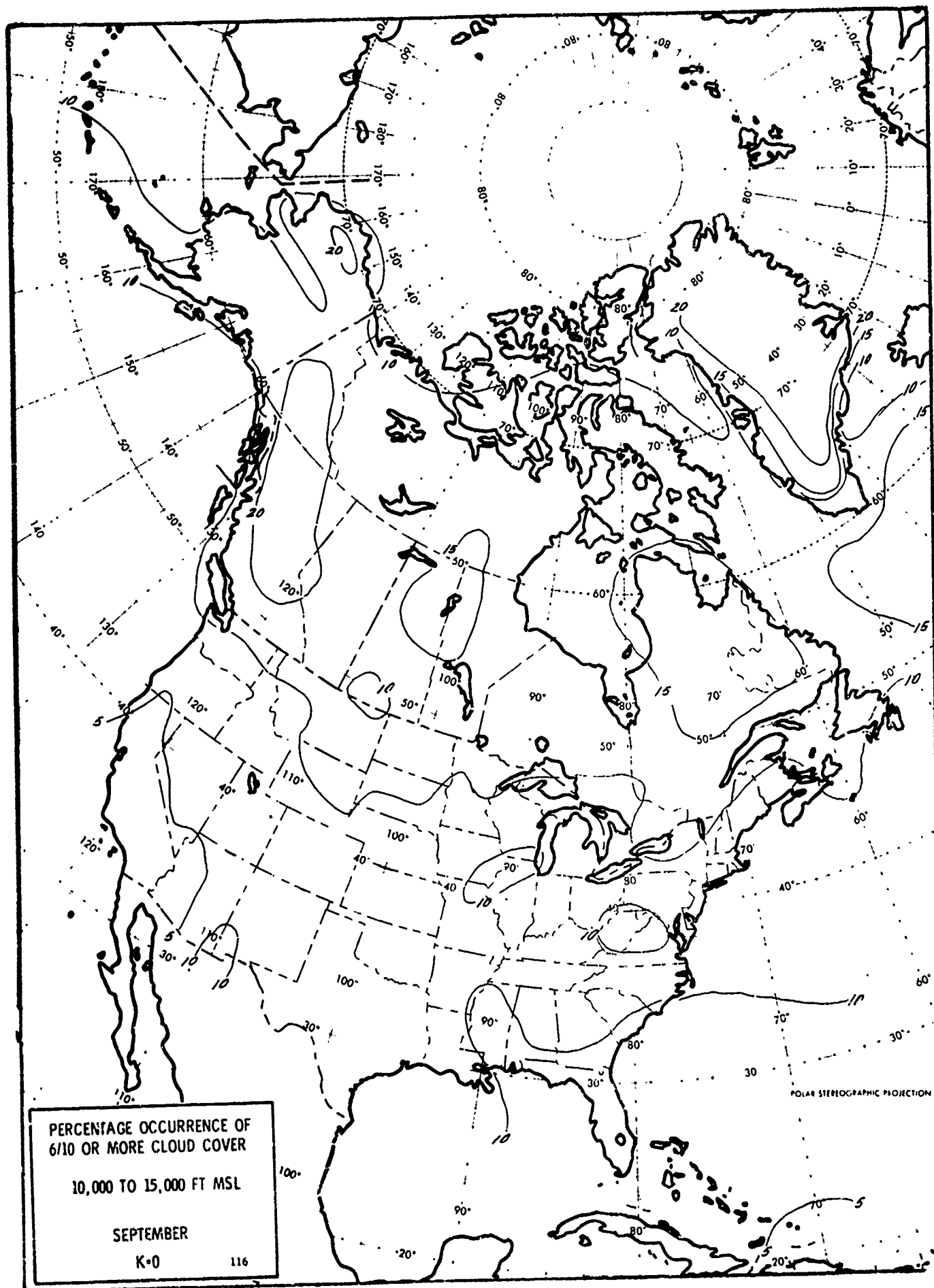
SEPTEMBER

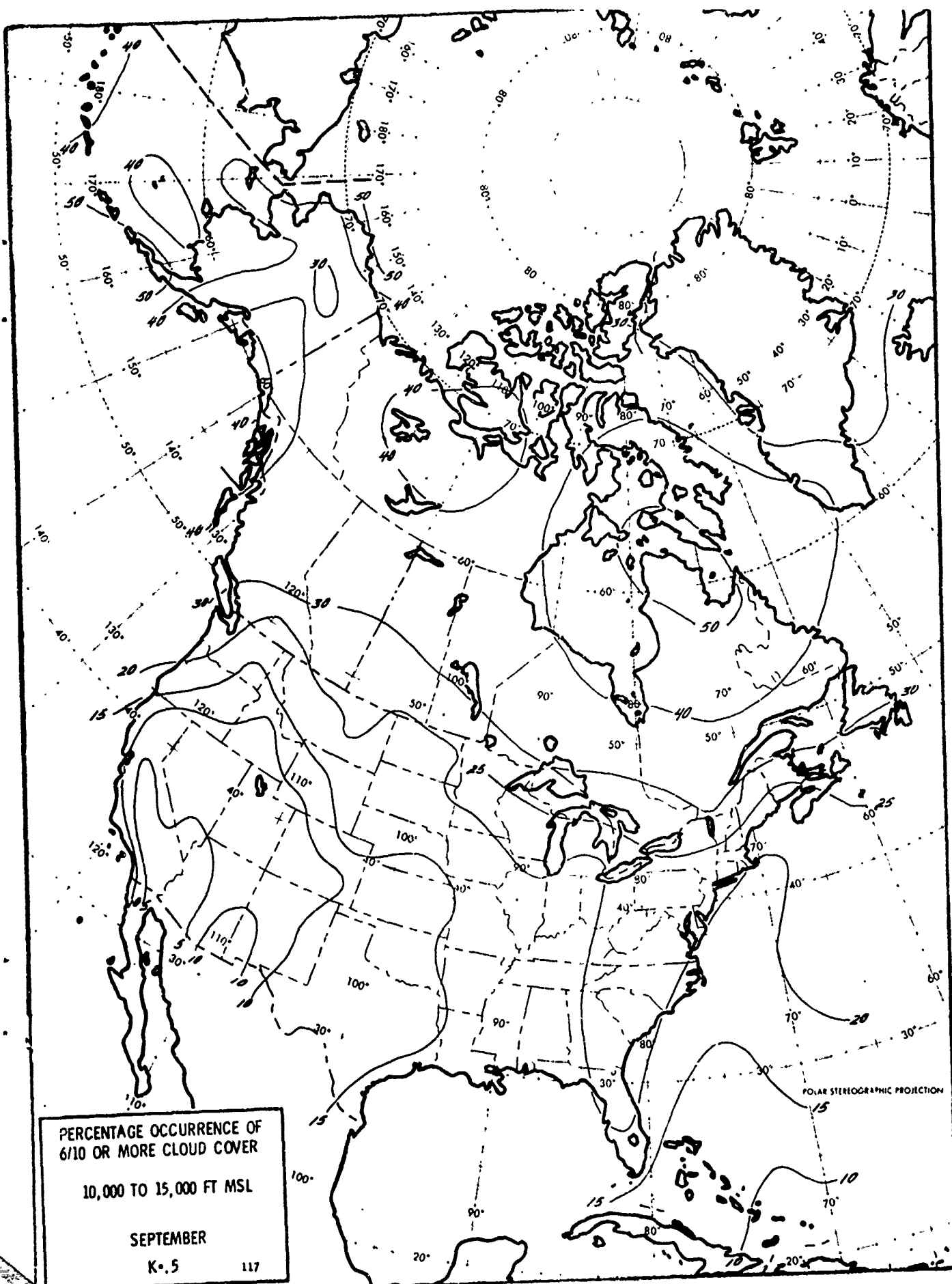
K=0

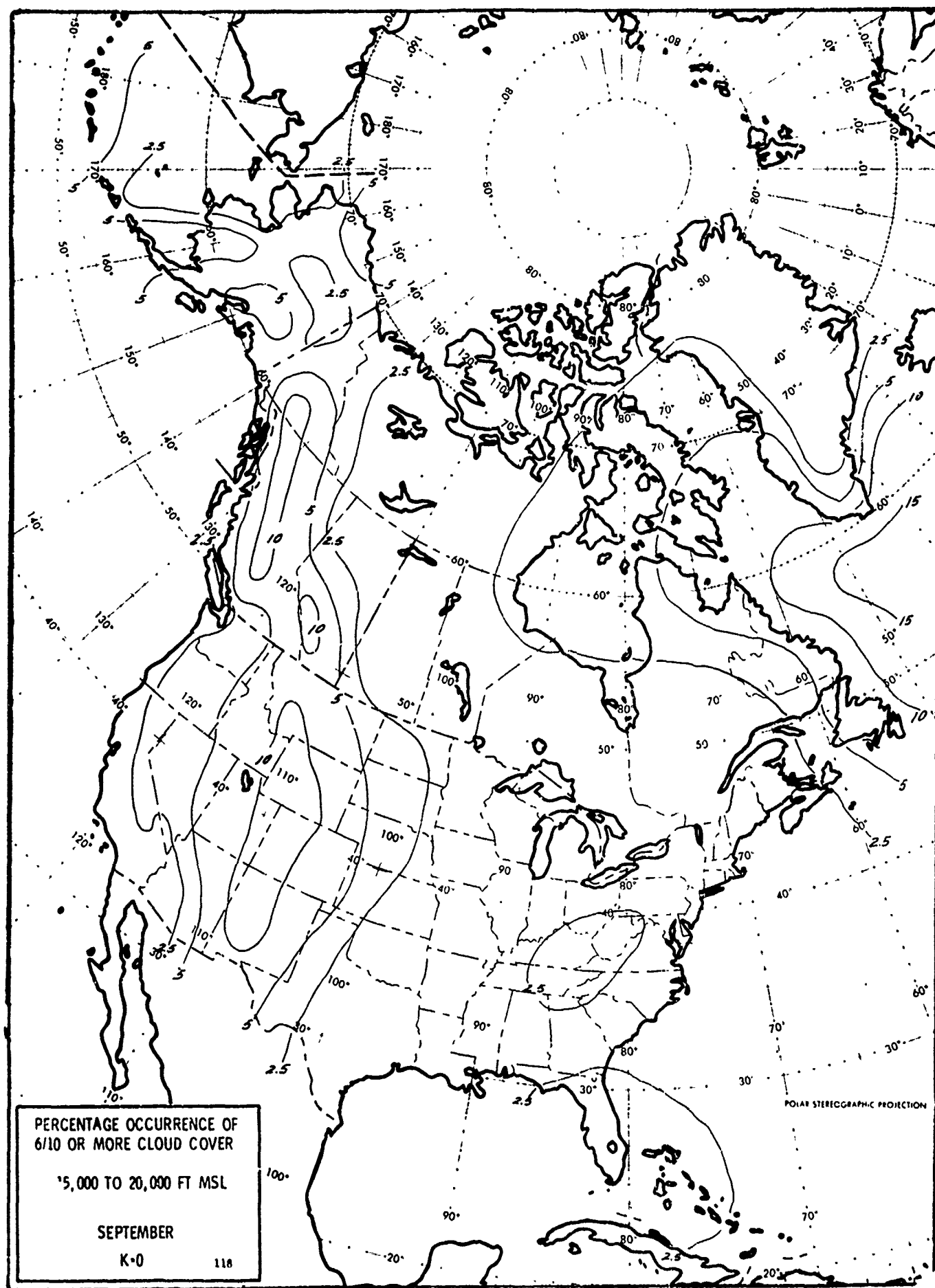
114

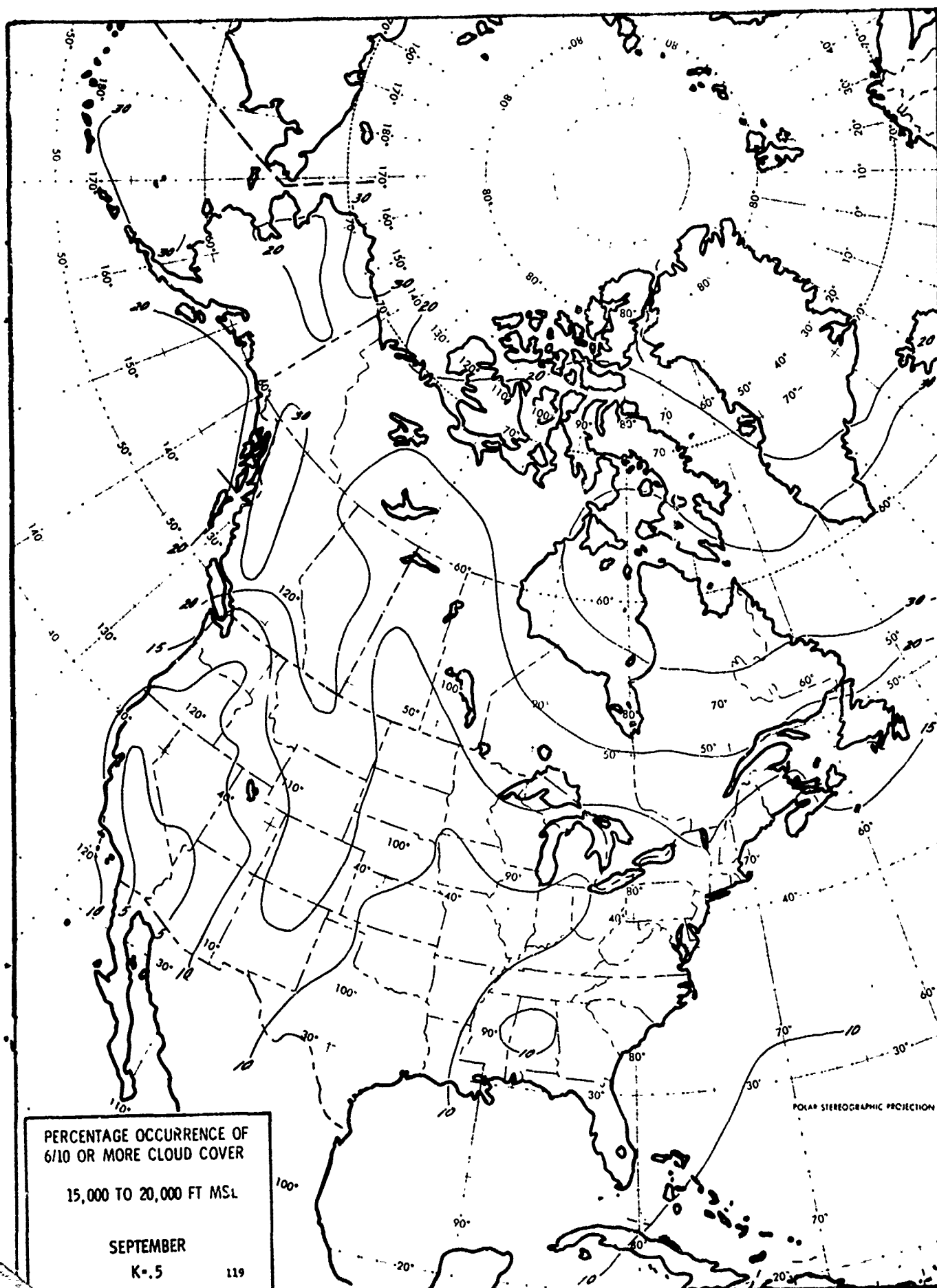
POLAR STEREOGRAPHIC PROJECTION

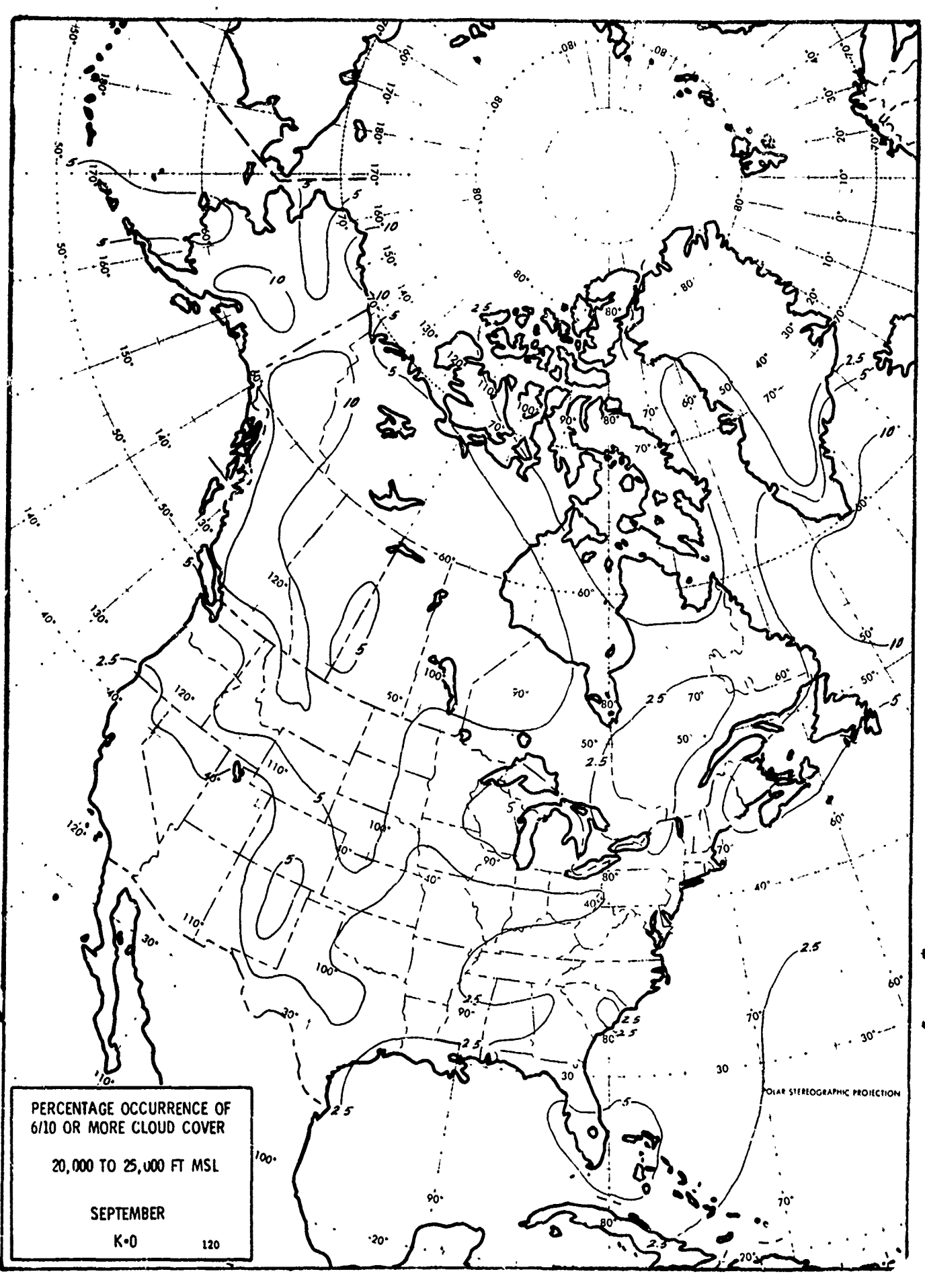












PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

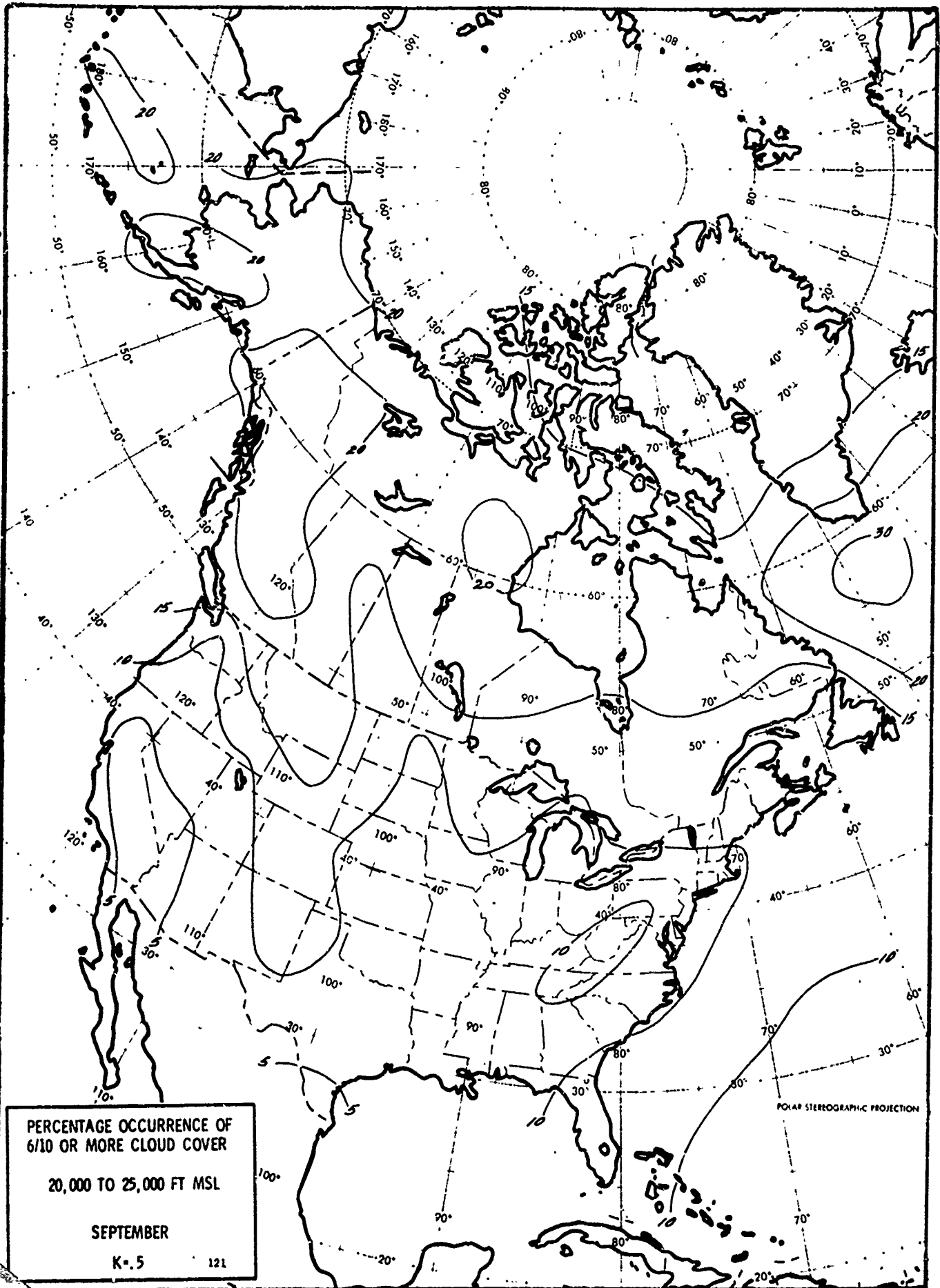
20,000 TO 25,000 FT MSL

SEPTEMBER

K-0

120

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

20,000 TO 25,000 FT MSL

SEPTEMBER

K-5

121

POLAR STEREOGRAPHIC PROJECTION

PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

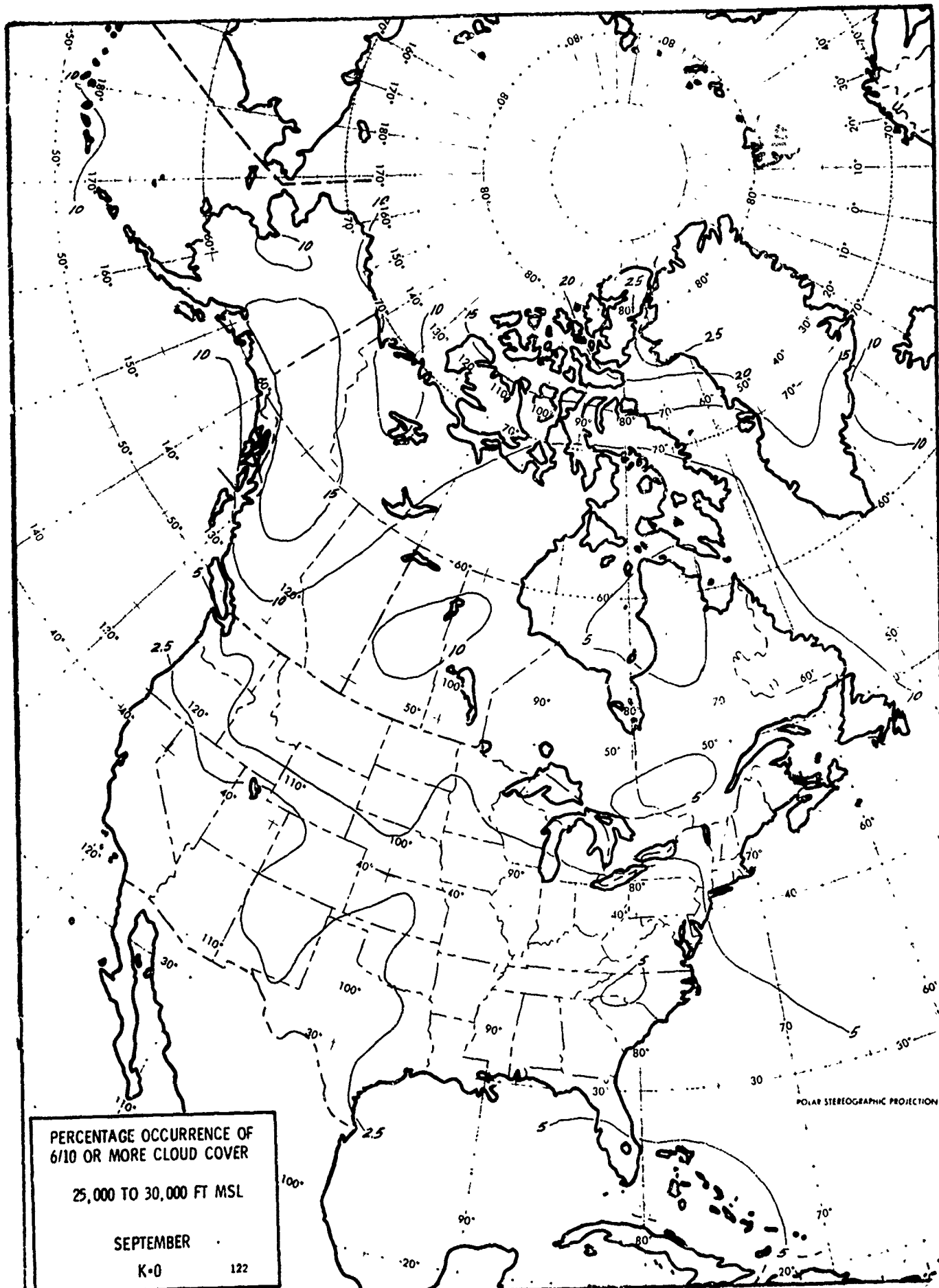
25,000 TO 30,000 FT MSL

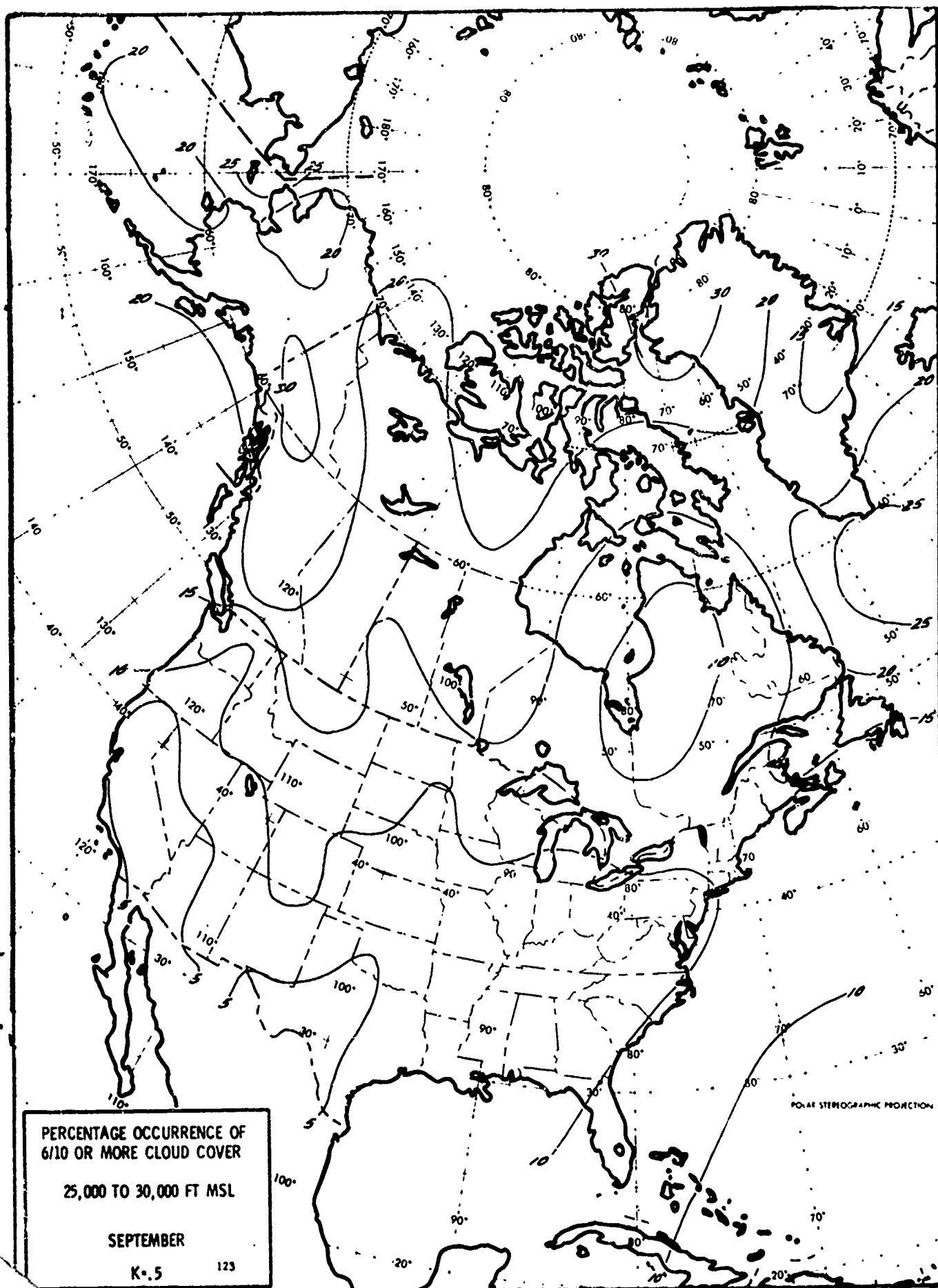
SEPTEMBER

K-0

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POLAR STEREOGRAPHIC PROJECTION





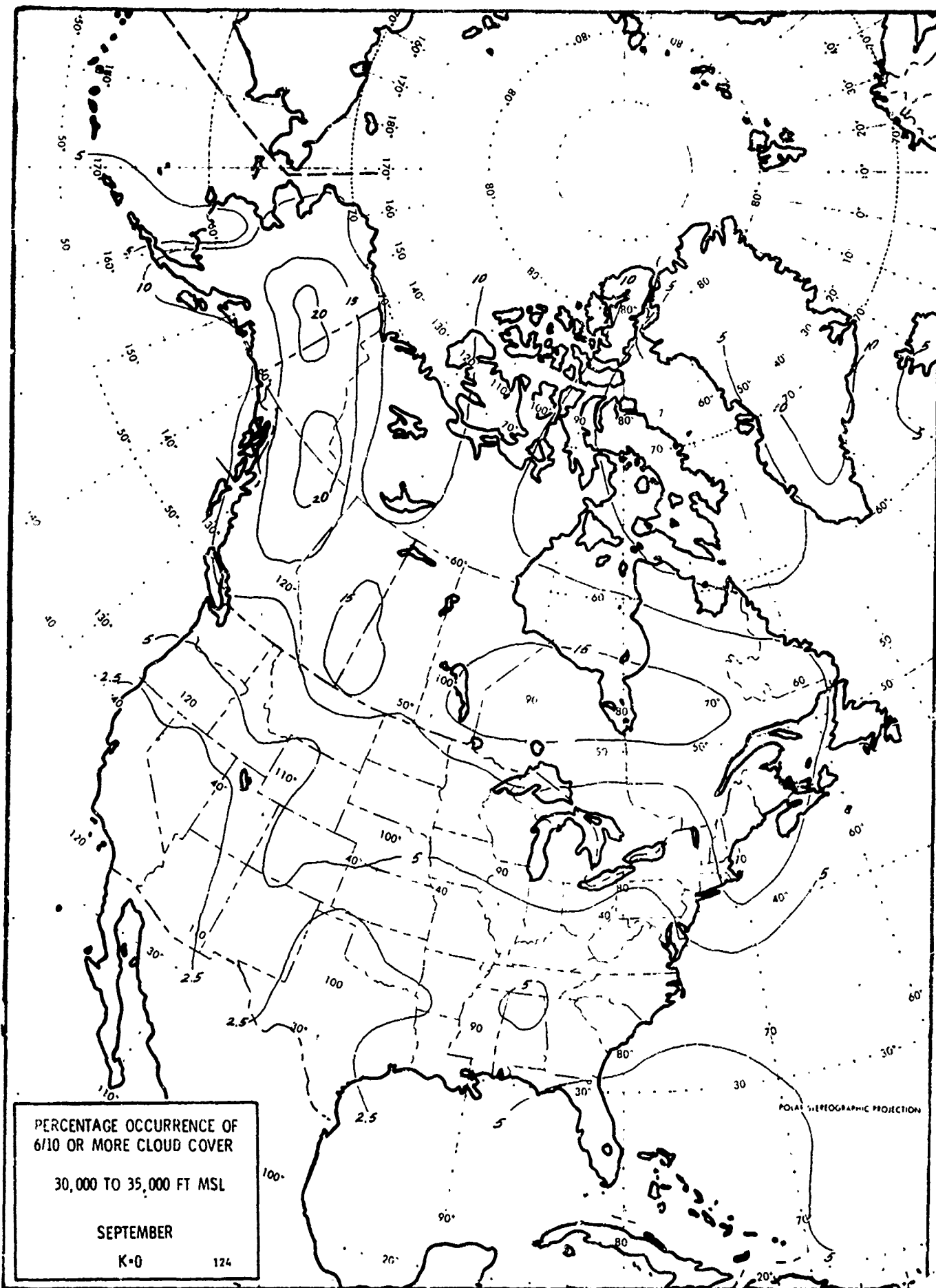
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

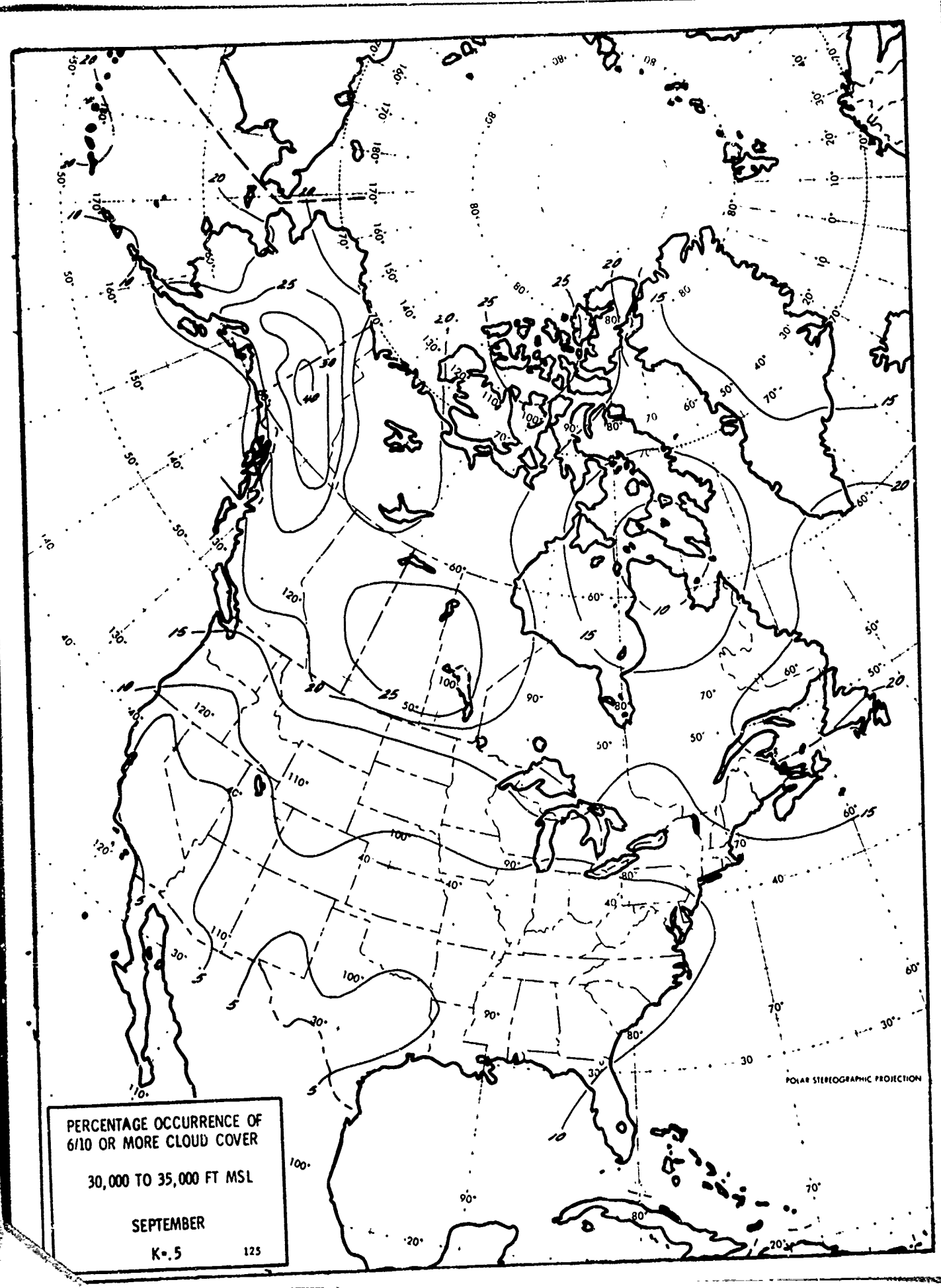
25,000 TO 30,000 FT MSL

SEPTEMBER

K-5

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

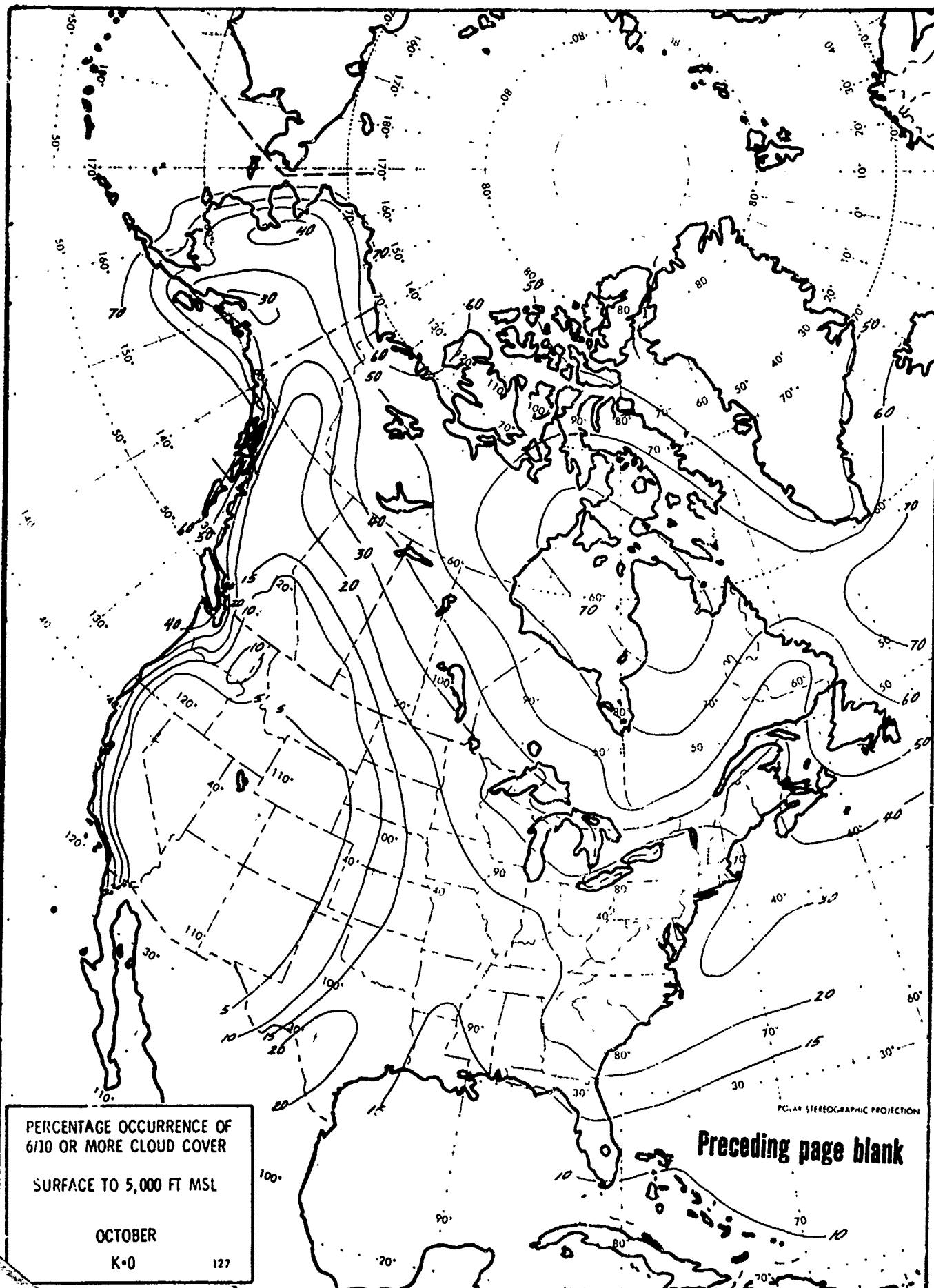
30,000 TO 35,000 FT MSL

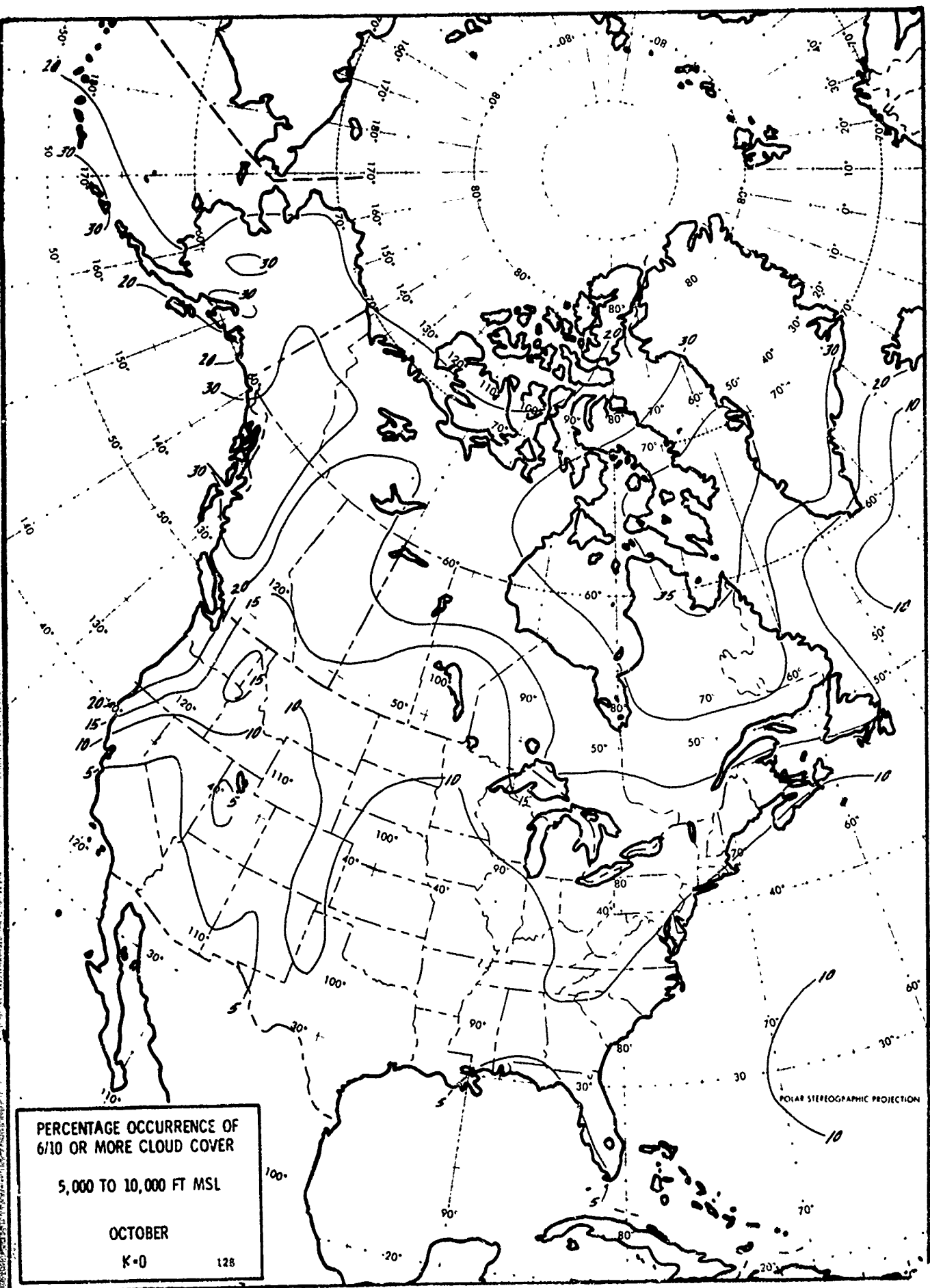
SEPTEMBER

K-5

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POLAR STEREOGRAPHIC PROJECTION





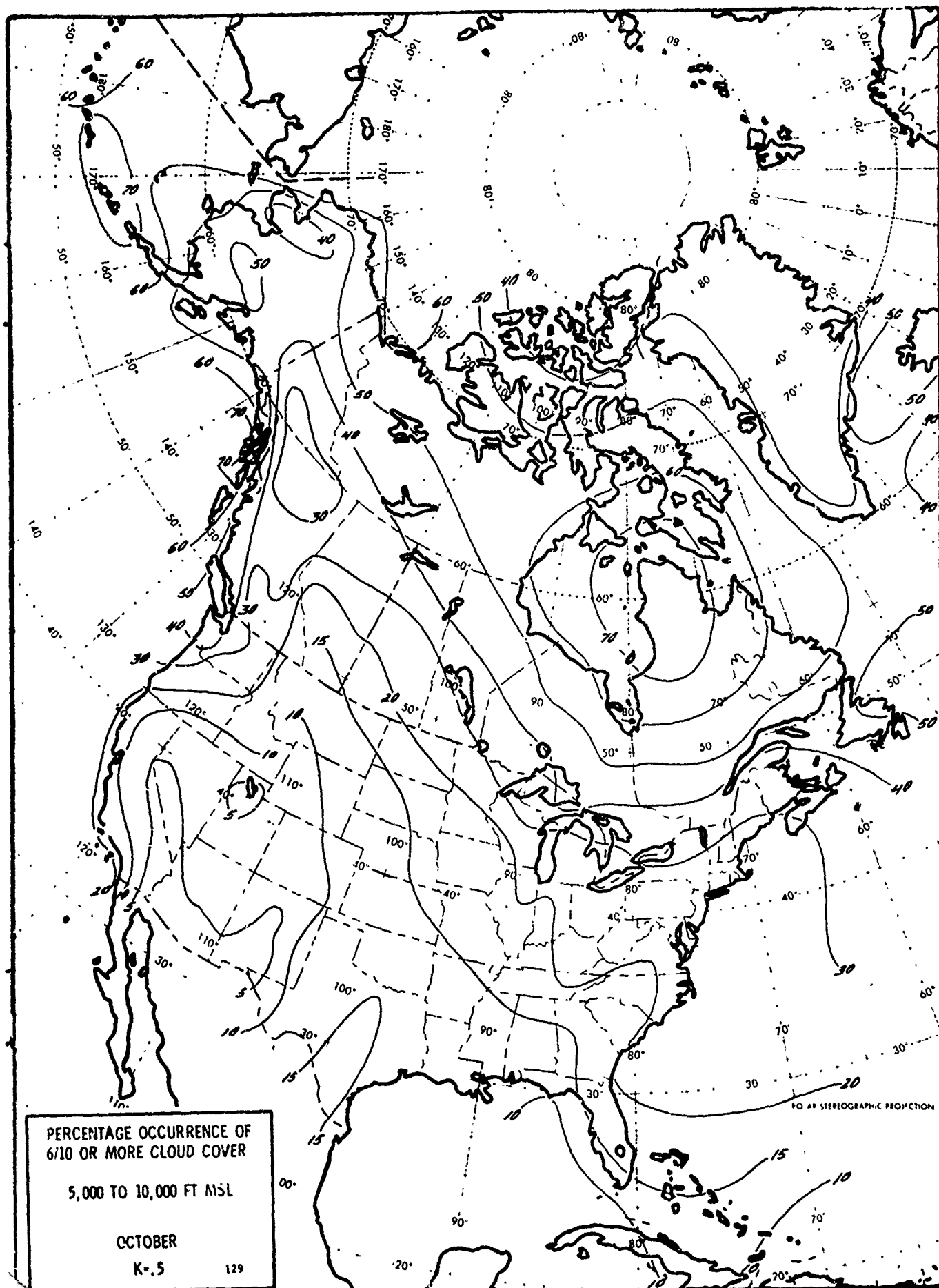
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

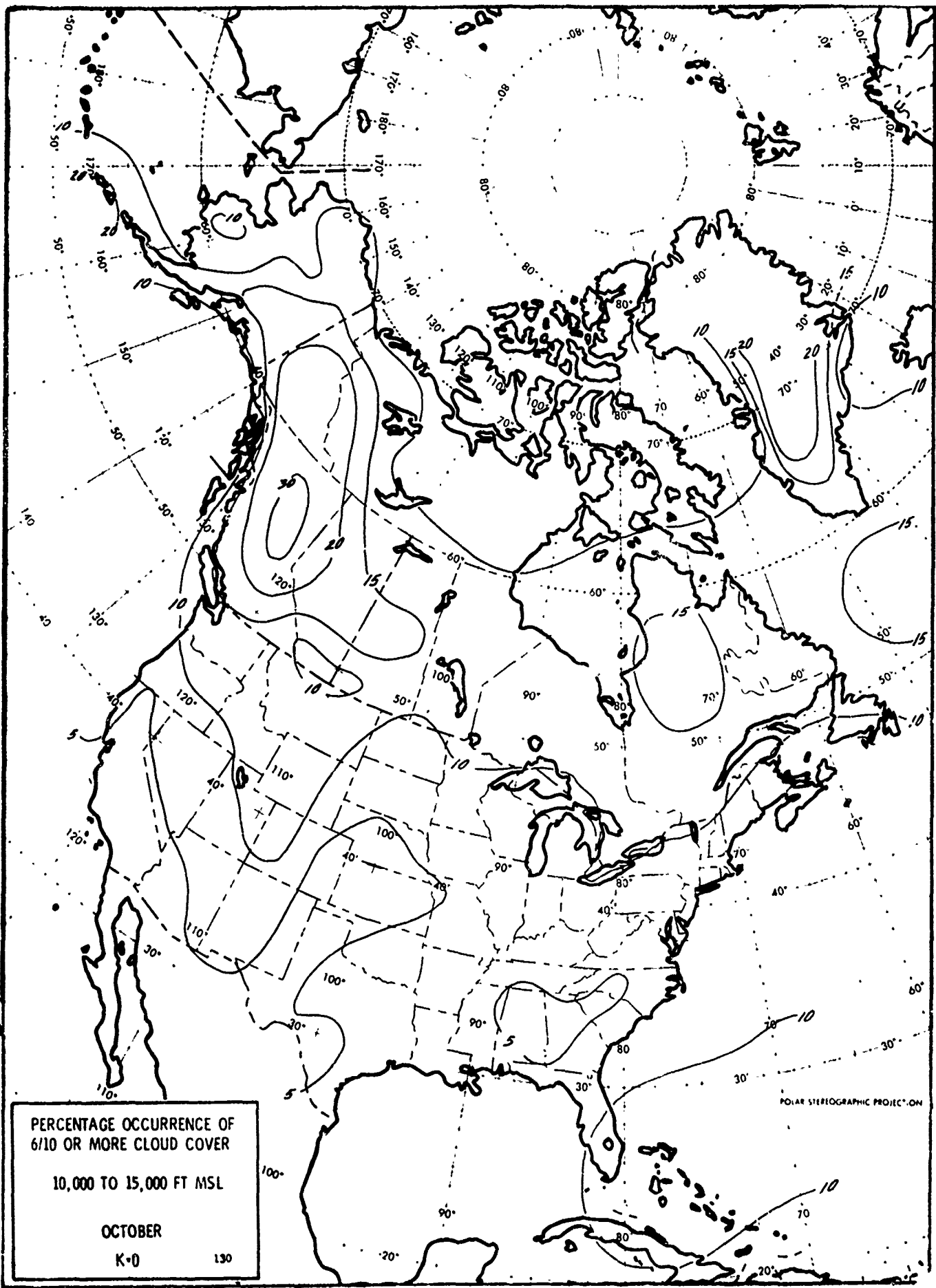
5,000 TO 10,000 FT MSL

OCTOBER

K-0

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

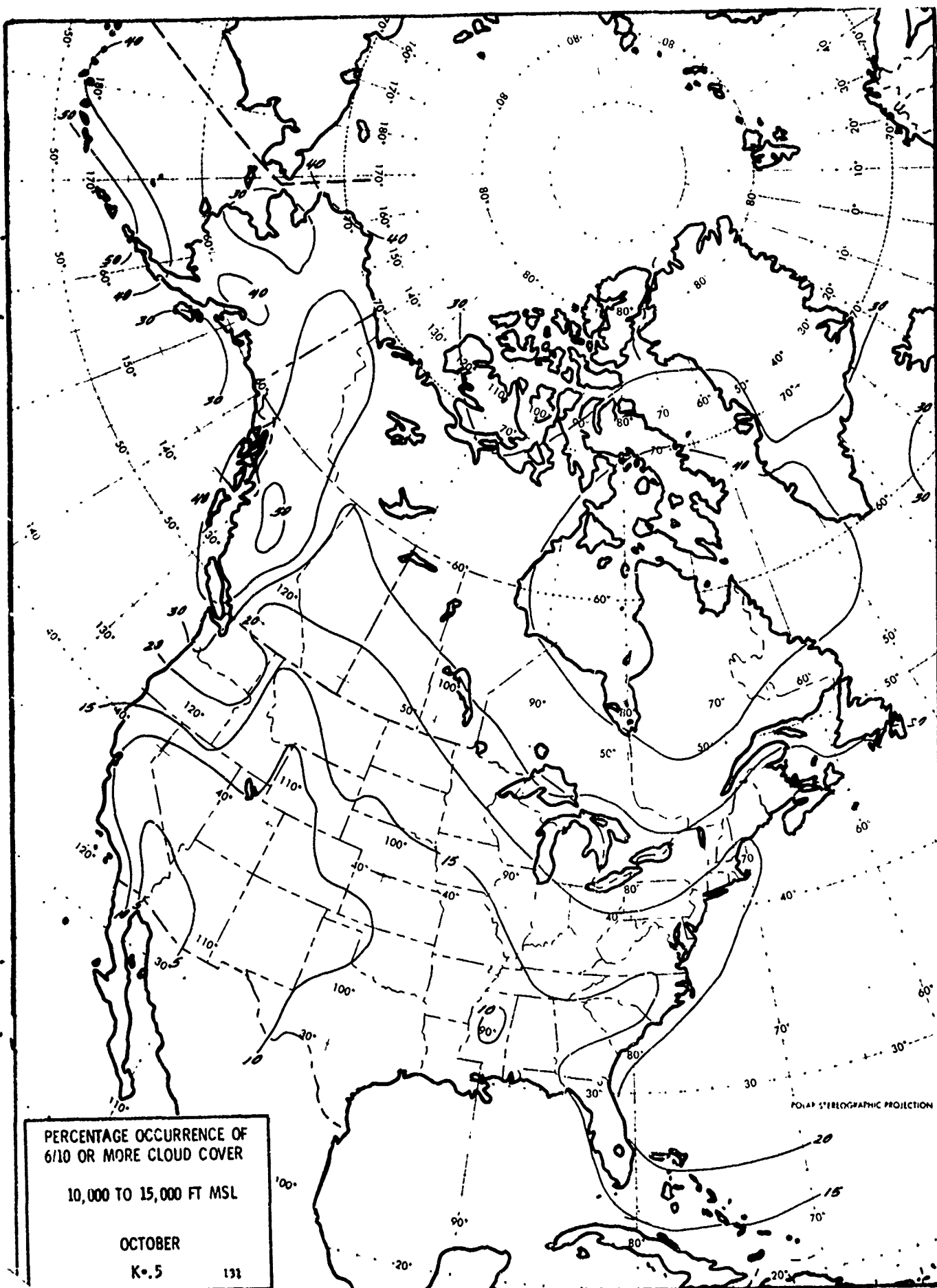
10,000 TO 15,000 FT MSL

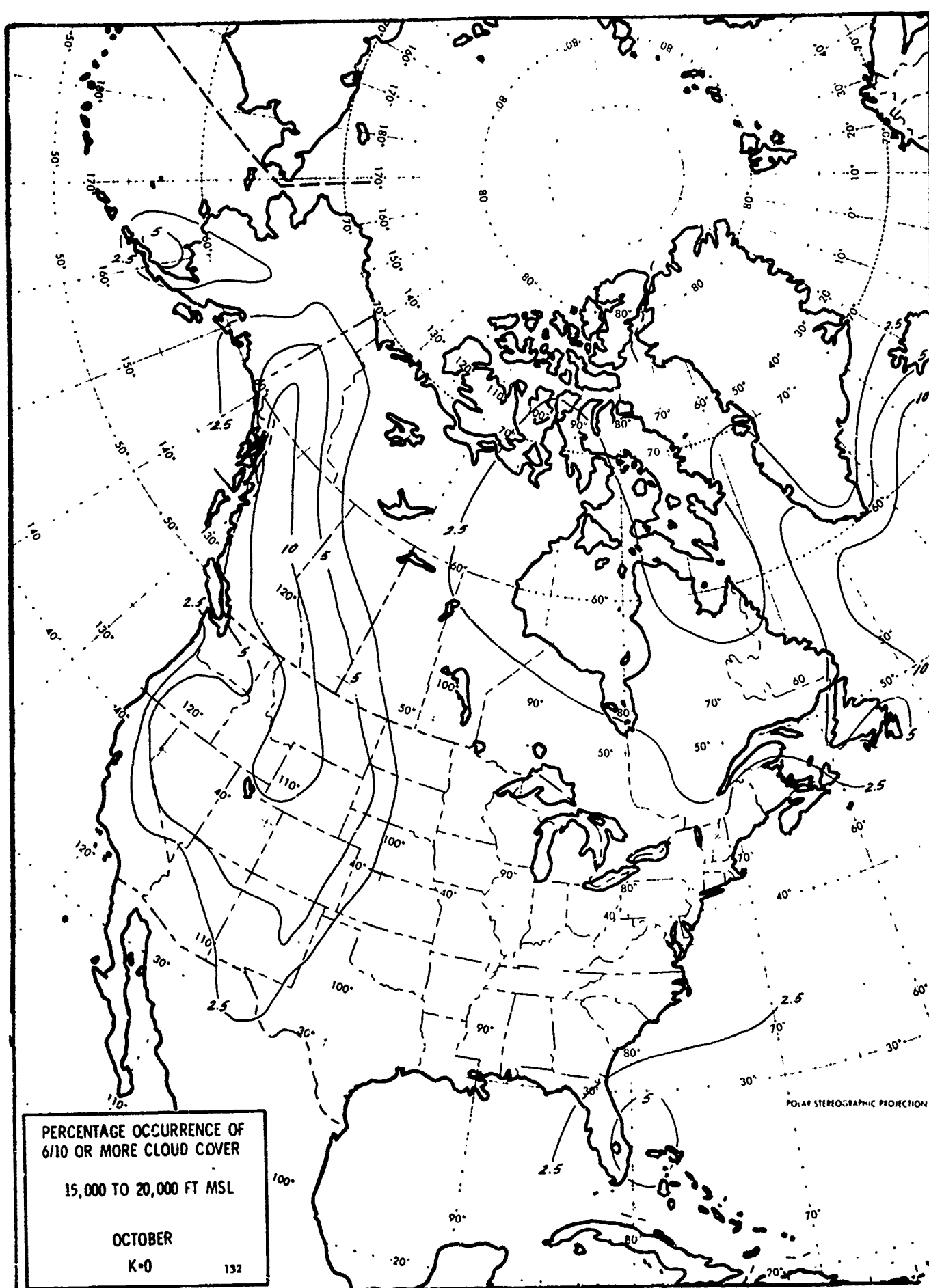
OCTOBER

K-0

130

POLAR STEREOGRAPHIC PROJECTION





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

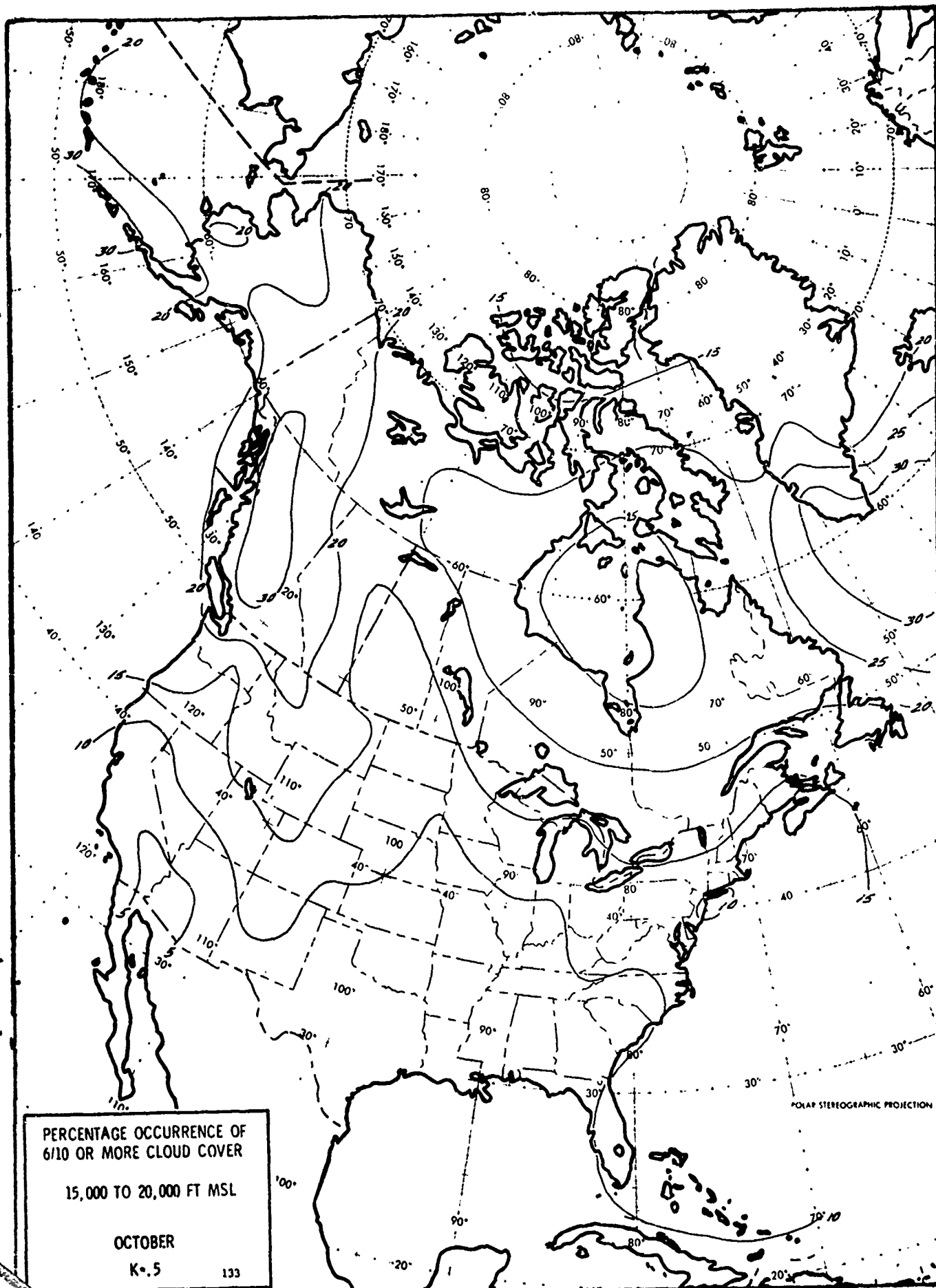
15,000 TO 20,000 FT MSL

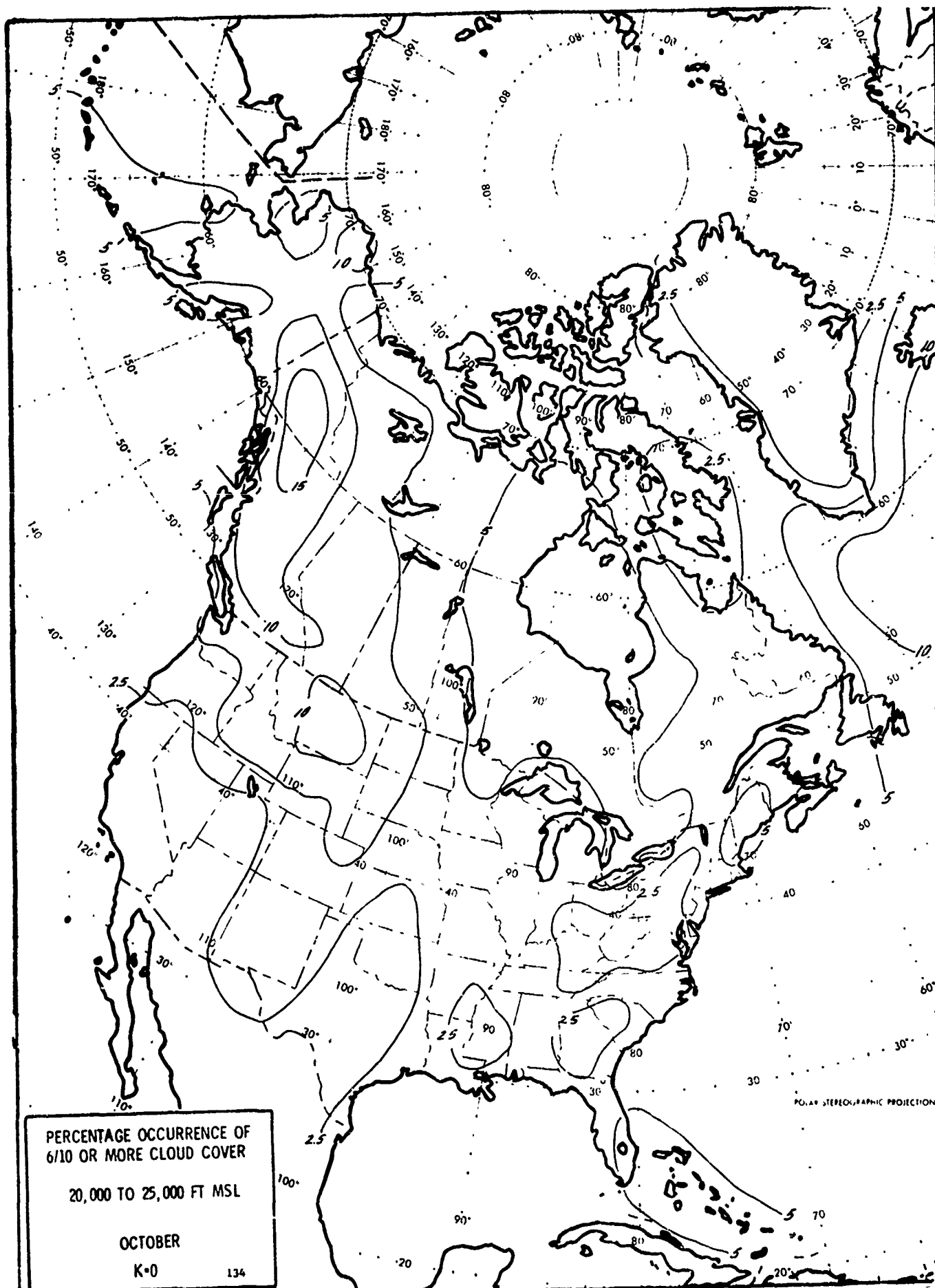
OCTOBER

K-0

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POLAR STEREOGRAPHIC PROJECTION



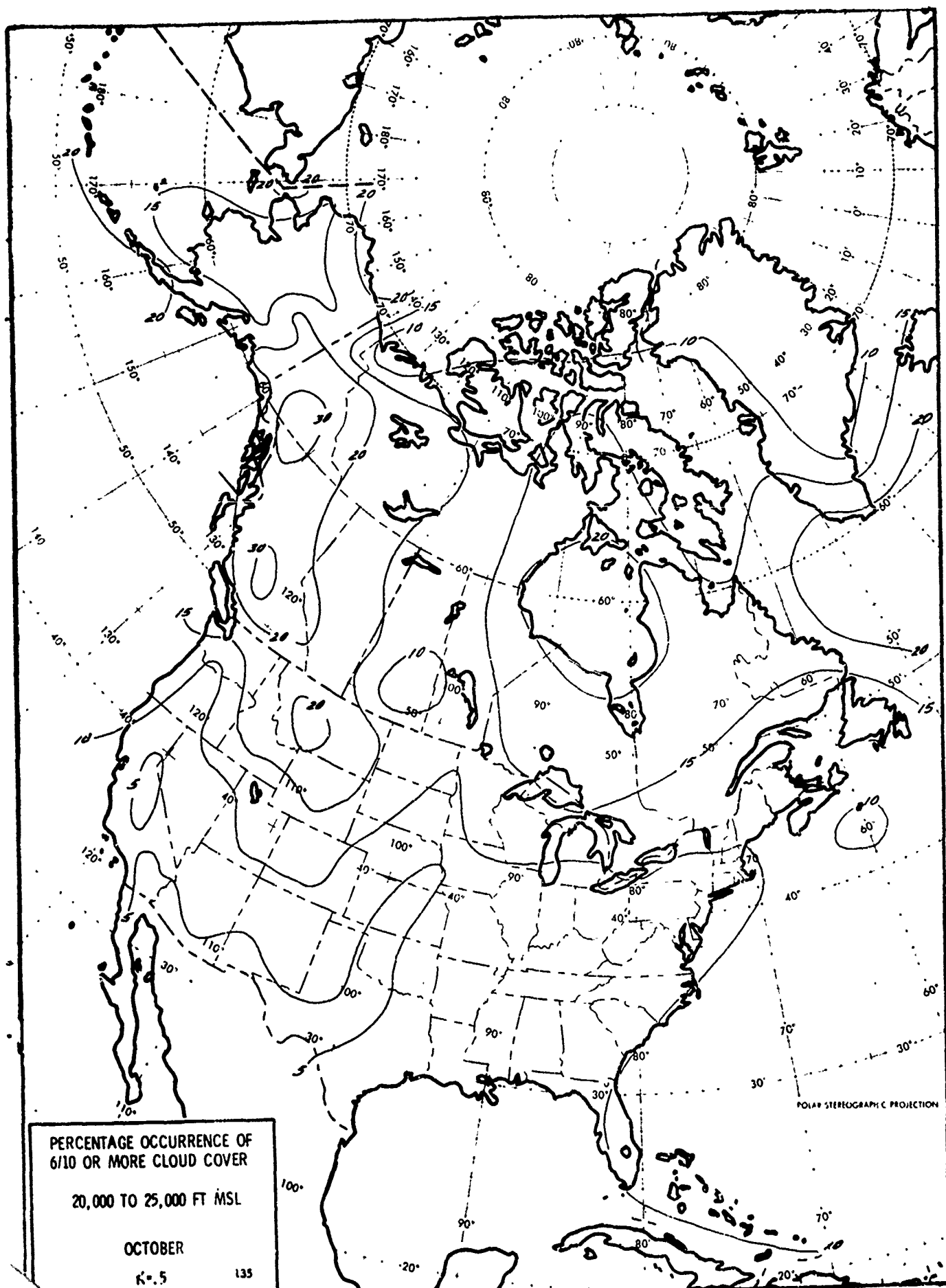


PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

20,000 TO 25,000 FT MSL

OCTOBER
K-0 134

POLAR STEREOGRAPHIC PROJECTION



POLAR STEREOGRAPHIC PROJECTION

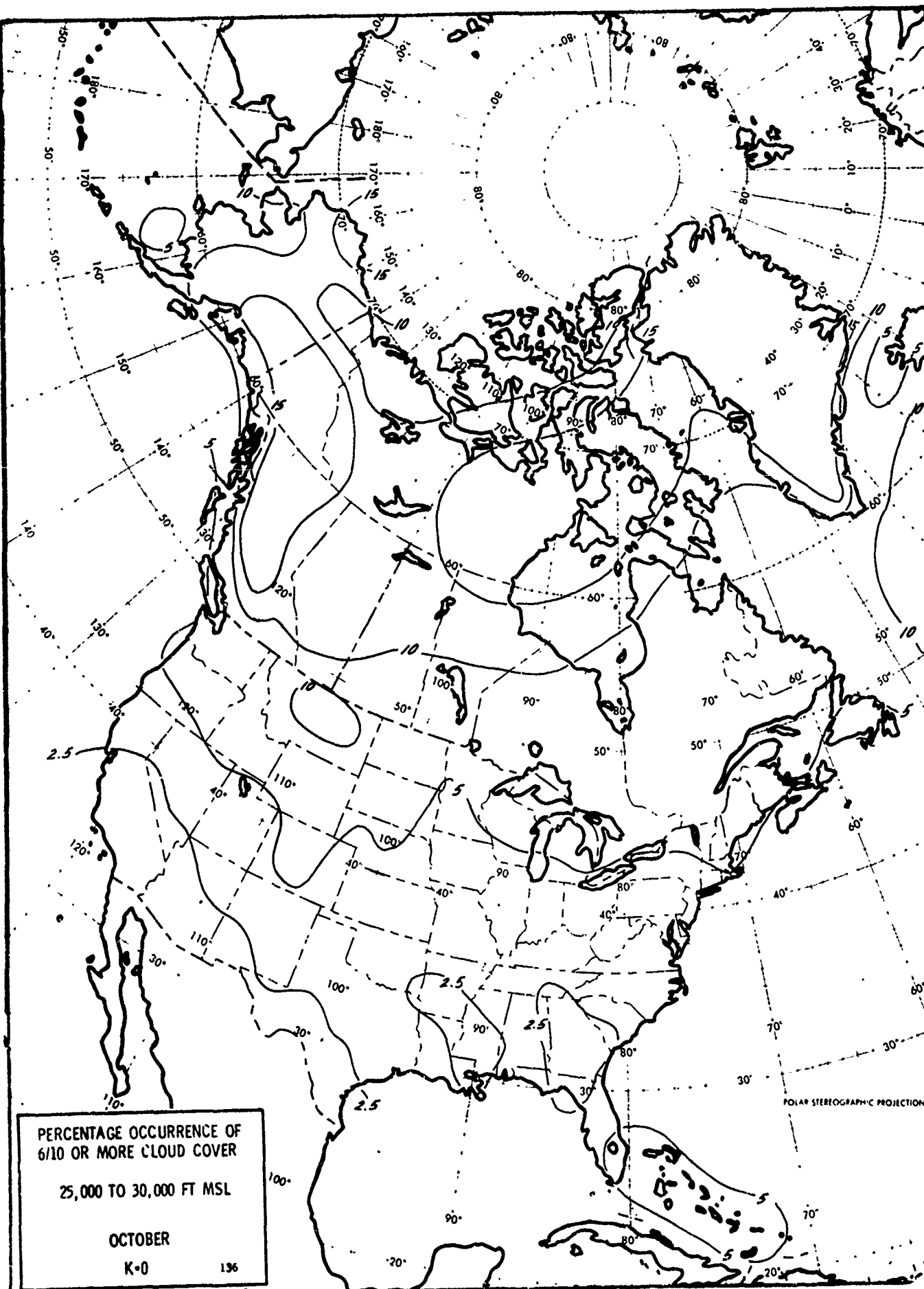
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

20,000 TO 25,000 FT MSL

OCTOBER

K=5

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

25,000 TO 30,000 FT MSL

OCTOBER

K-0

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

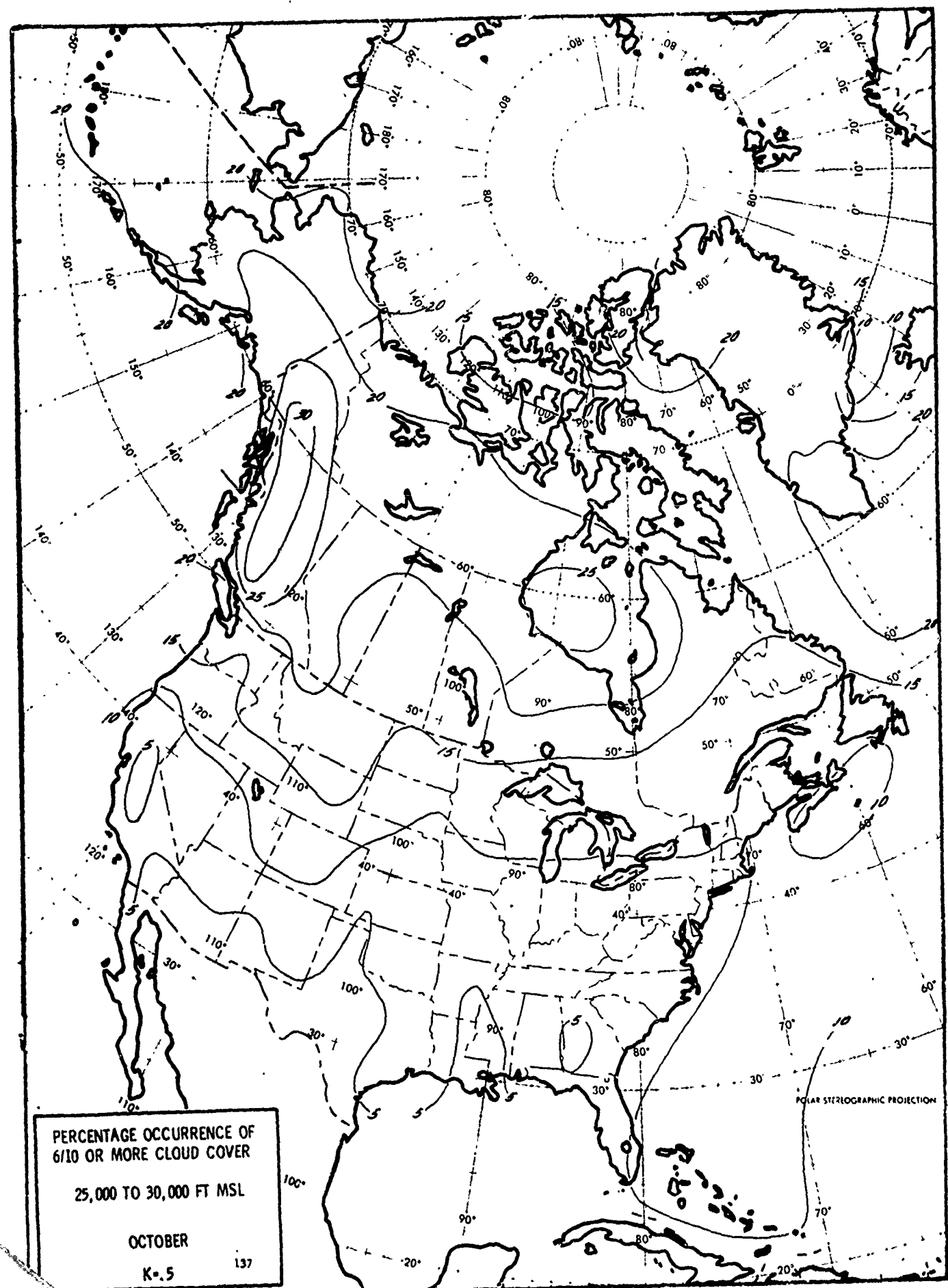
25,000 TO 30,000 FT MSL

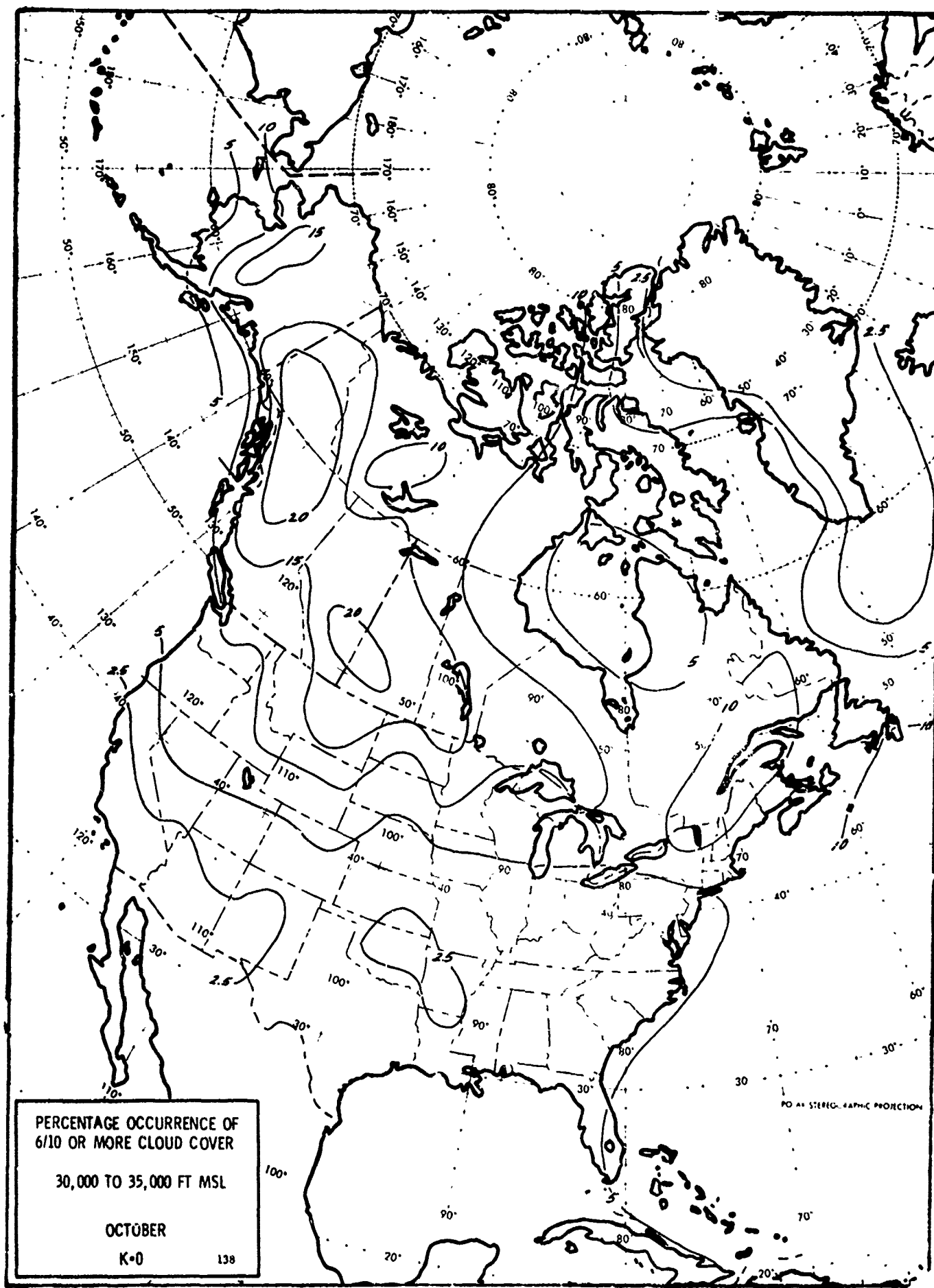
OCTOBER

K-5

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POLAR STEREOGRAPHIC PROJECTION





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

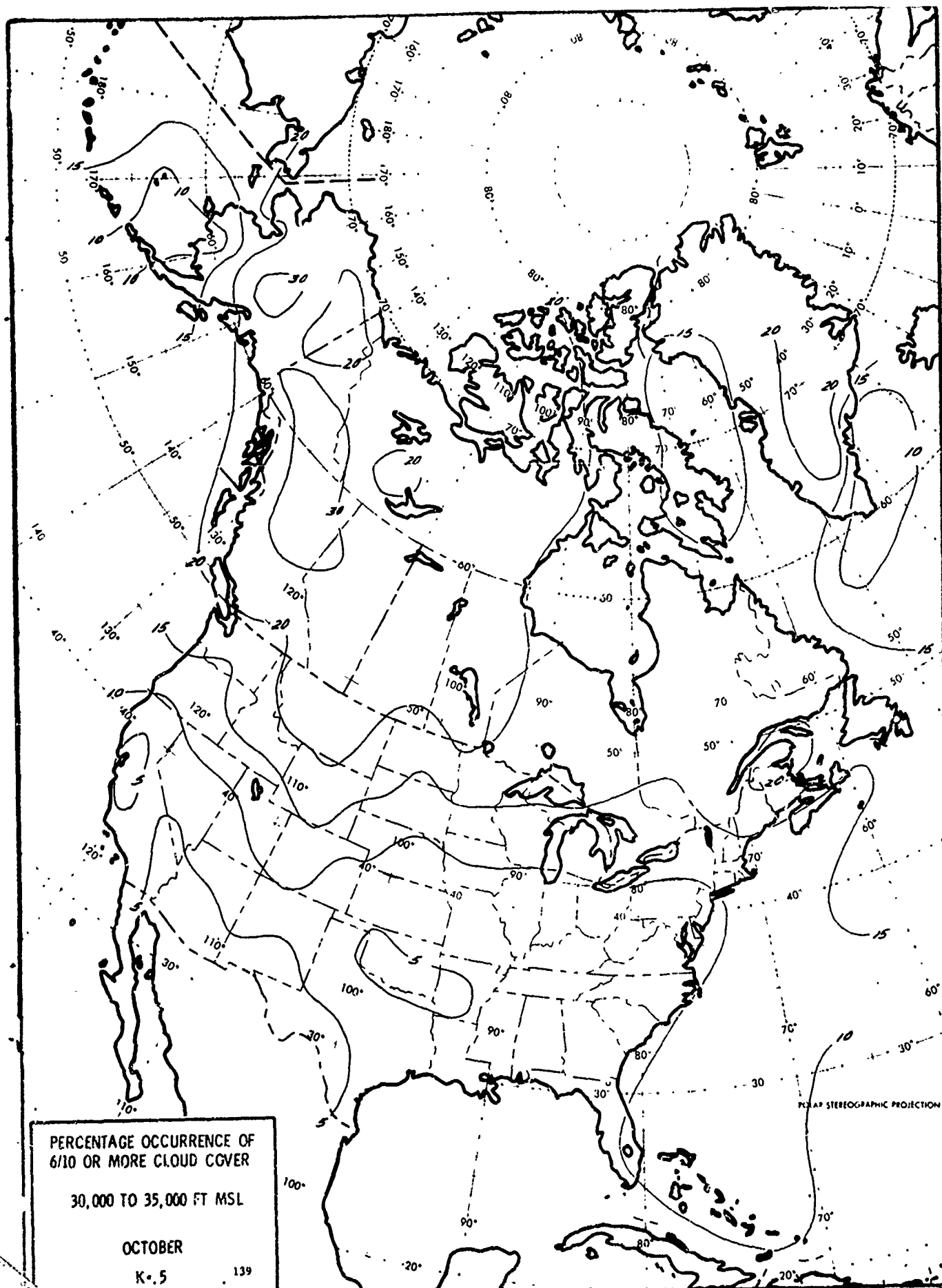
30,000 TO 35,000 FT MSL

OCTOBER

K-0

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PO AT STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
5/10 OR MORE CLOUD COVER
SURFACE TO 5,000 FT MSL

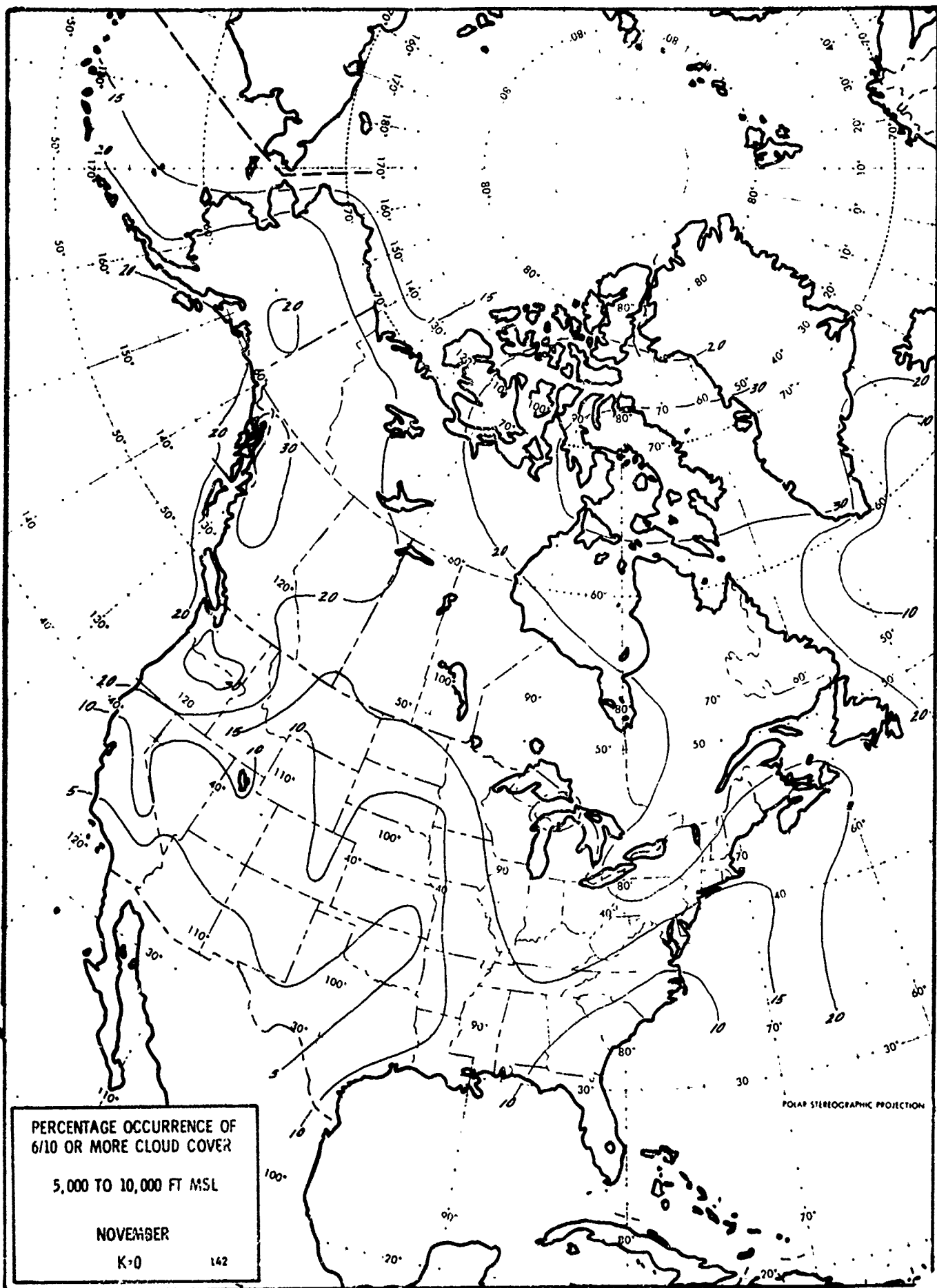
NOVEMBER

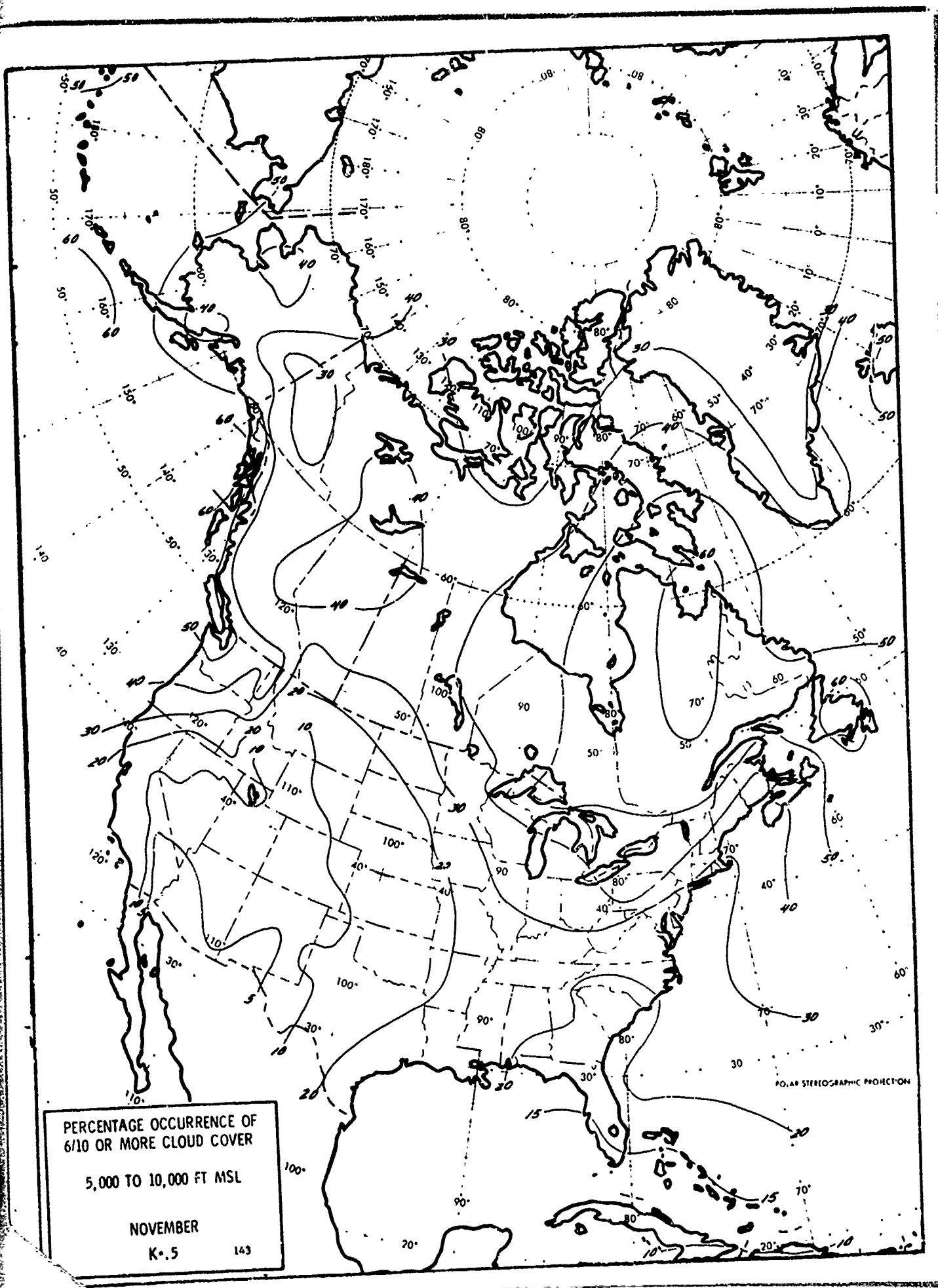
K-0

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POLAR STEREOGRAPHIC PROJECTION

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

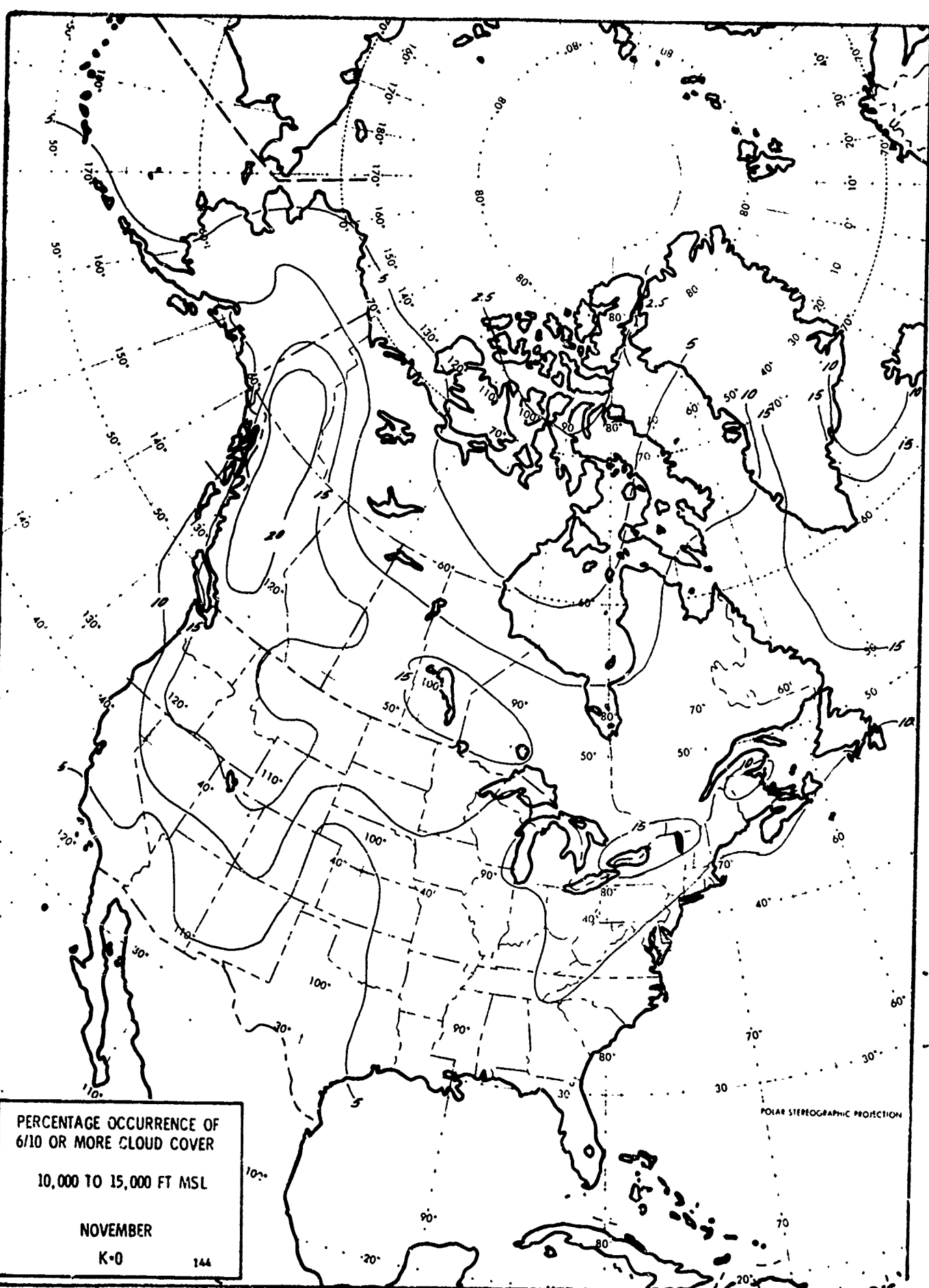
5,000 TO 10,000 FT MSL

NOVEMBER

K-5

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POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

10,000 TO 15,000 FT MSL

NOVEMBER

K-0

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PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

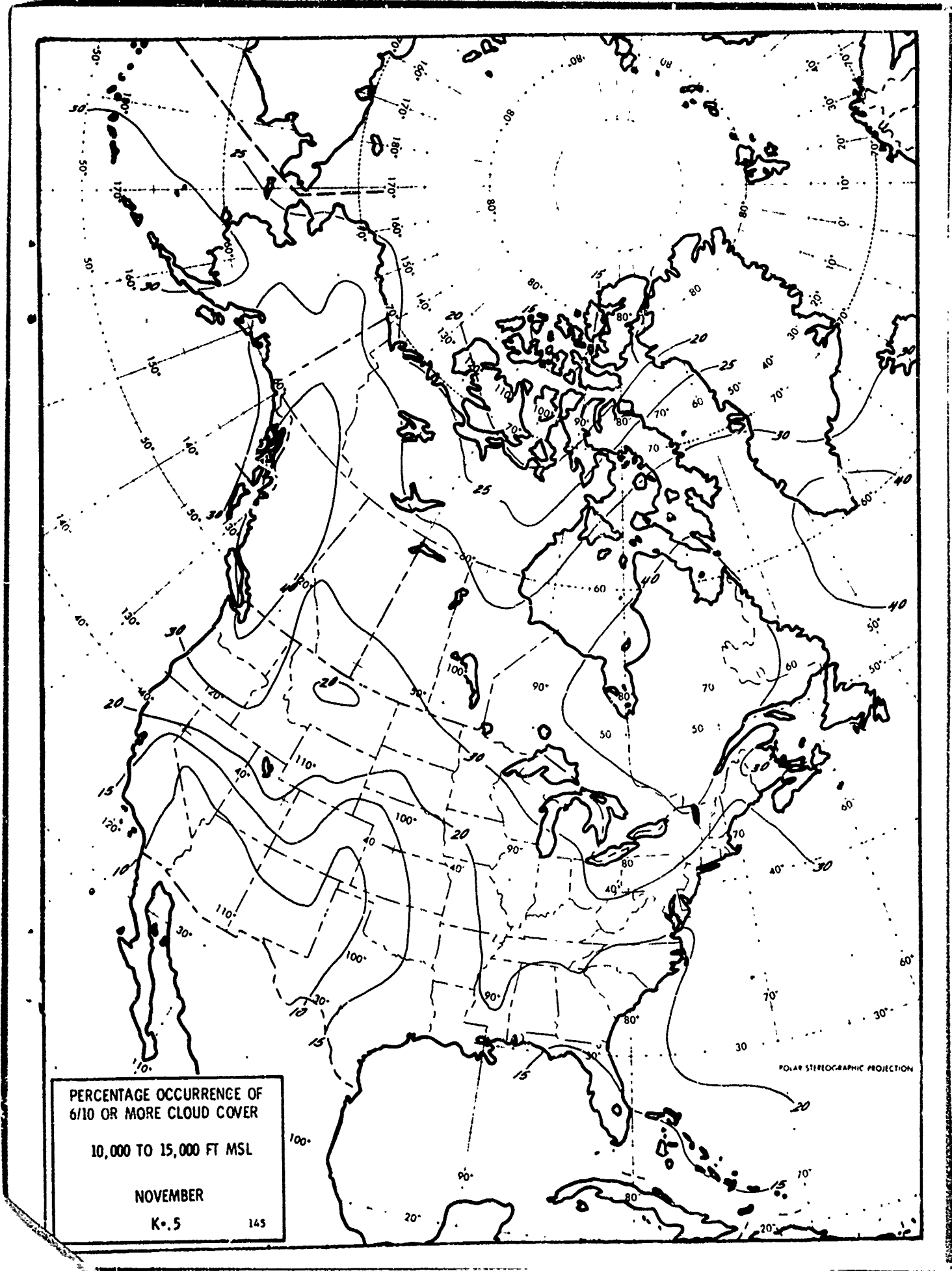
10,000 TO 15,000 FT MSL

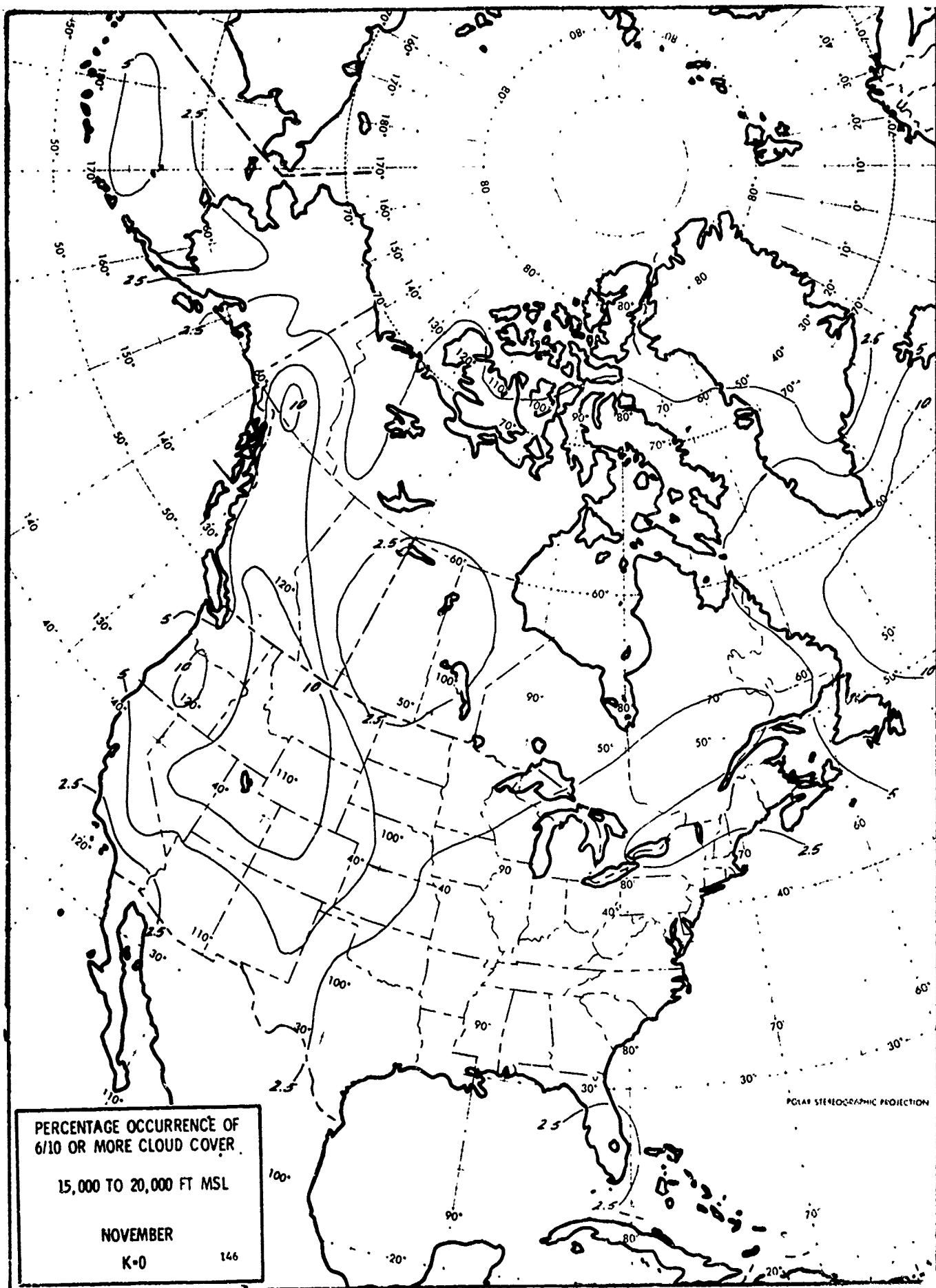
NOVEMBER

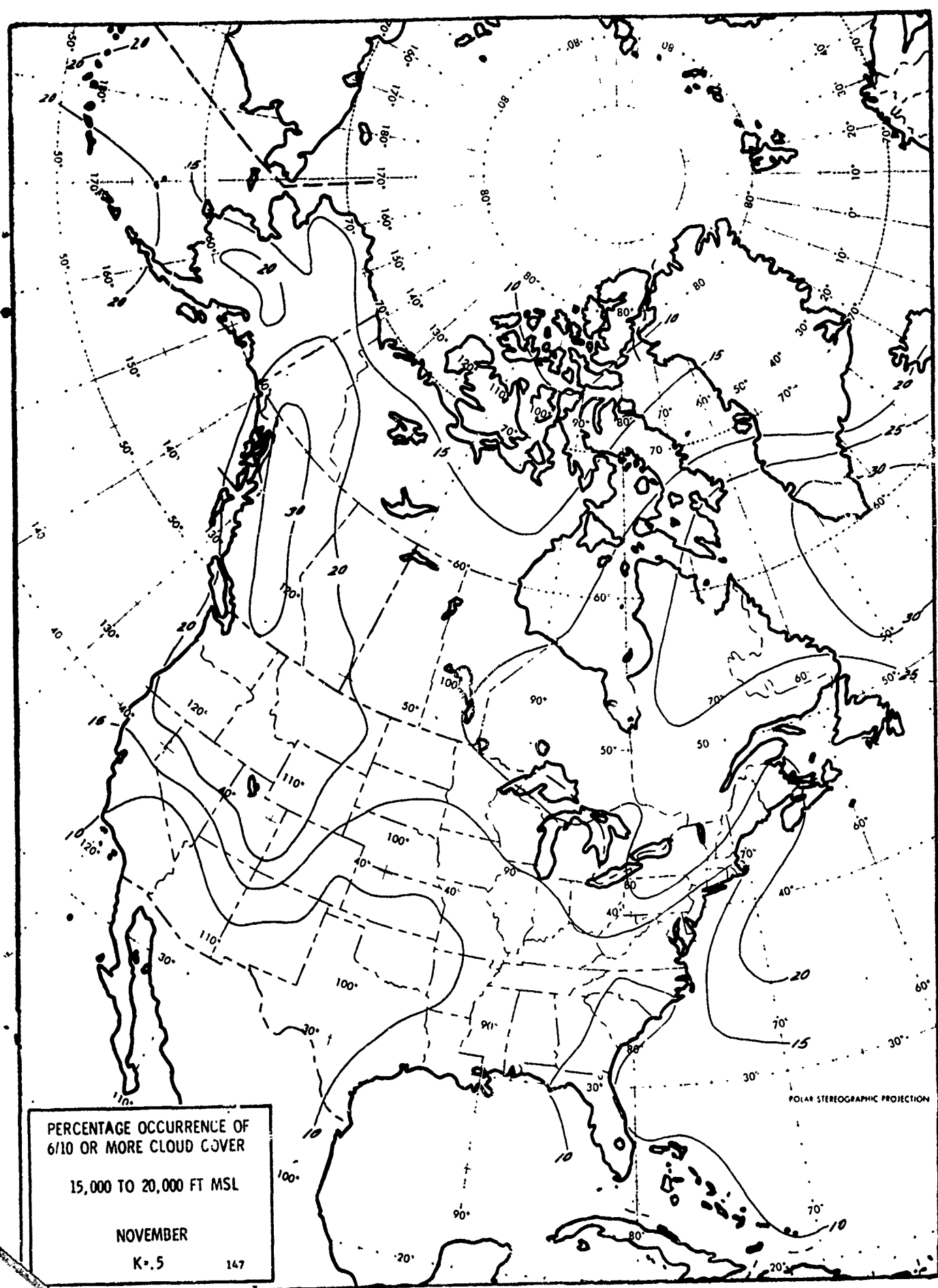
K-5

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POLAR STEREOGRAPHIC PROJECTION







PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

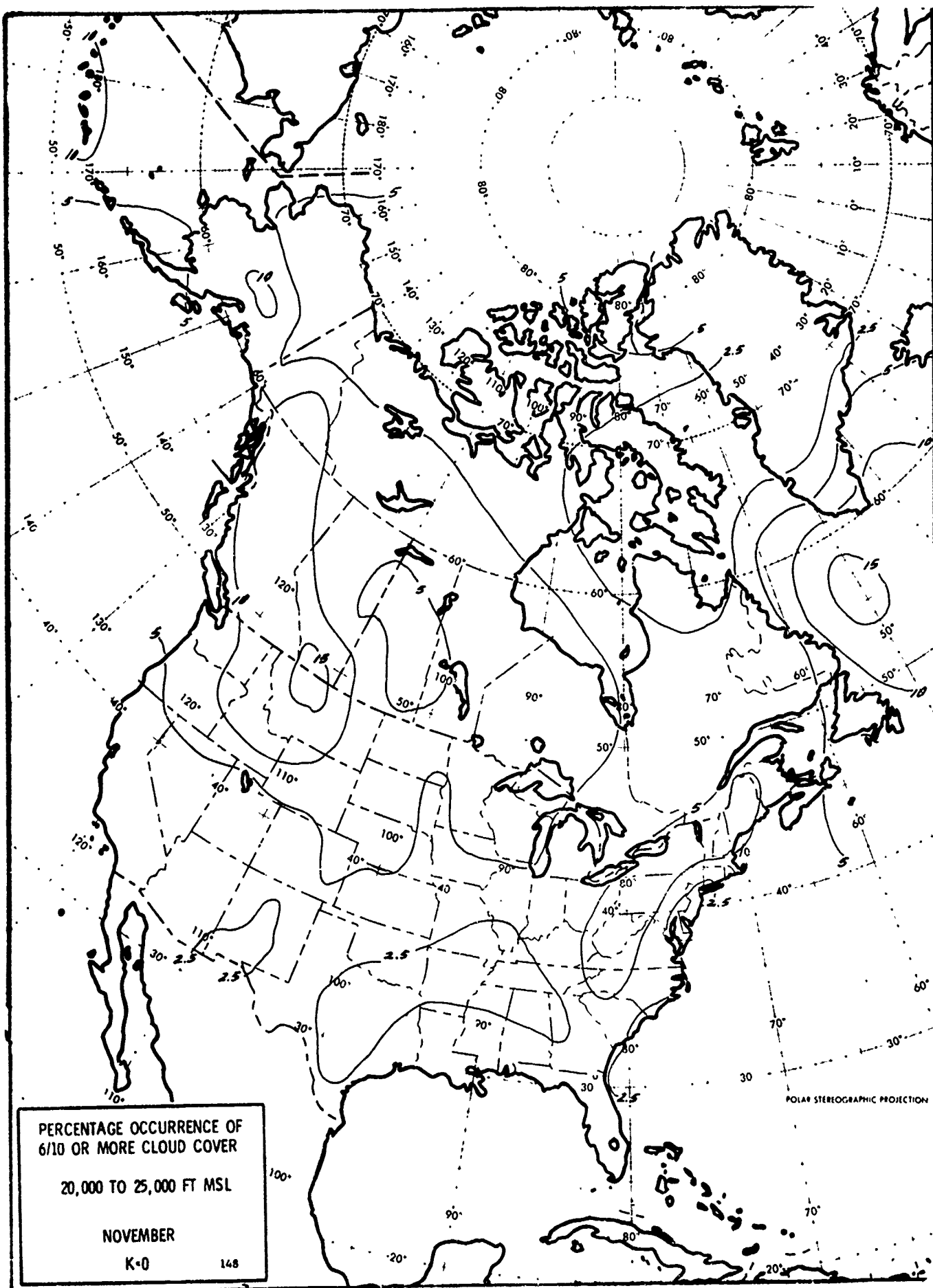
15,000 TO 20,000 FT MSL

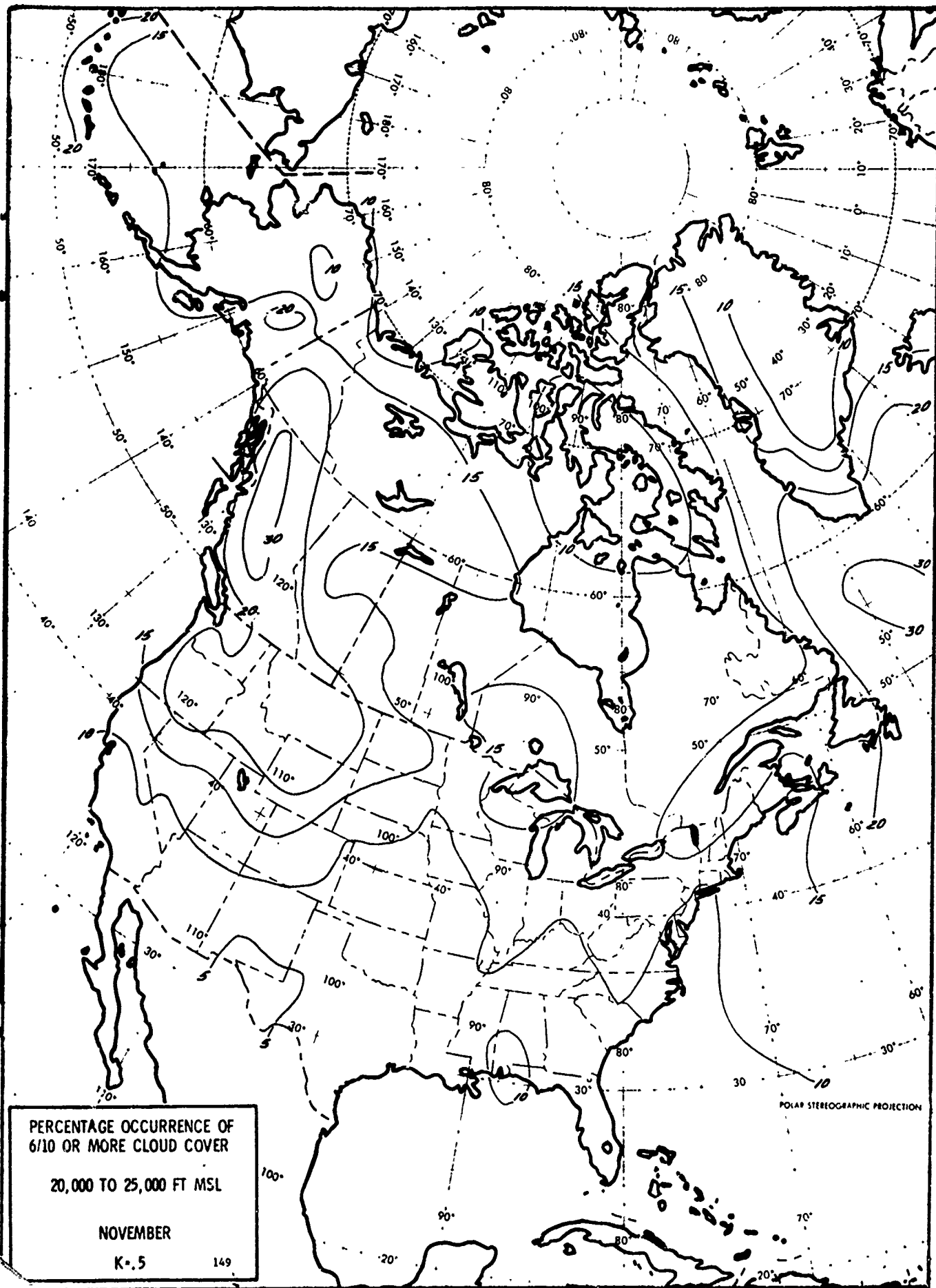
NOVEMBER

K=5

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POLAR STEREOGRAPHIC PROJECTION





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

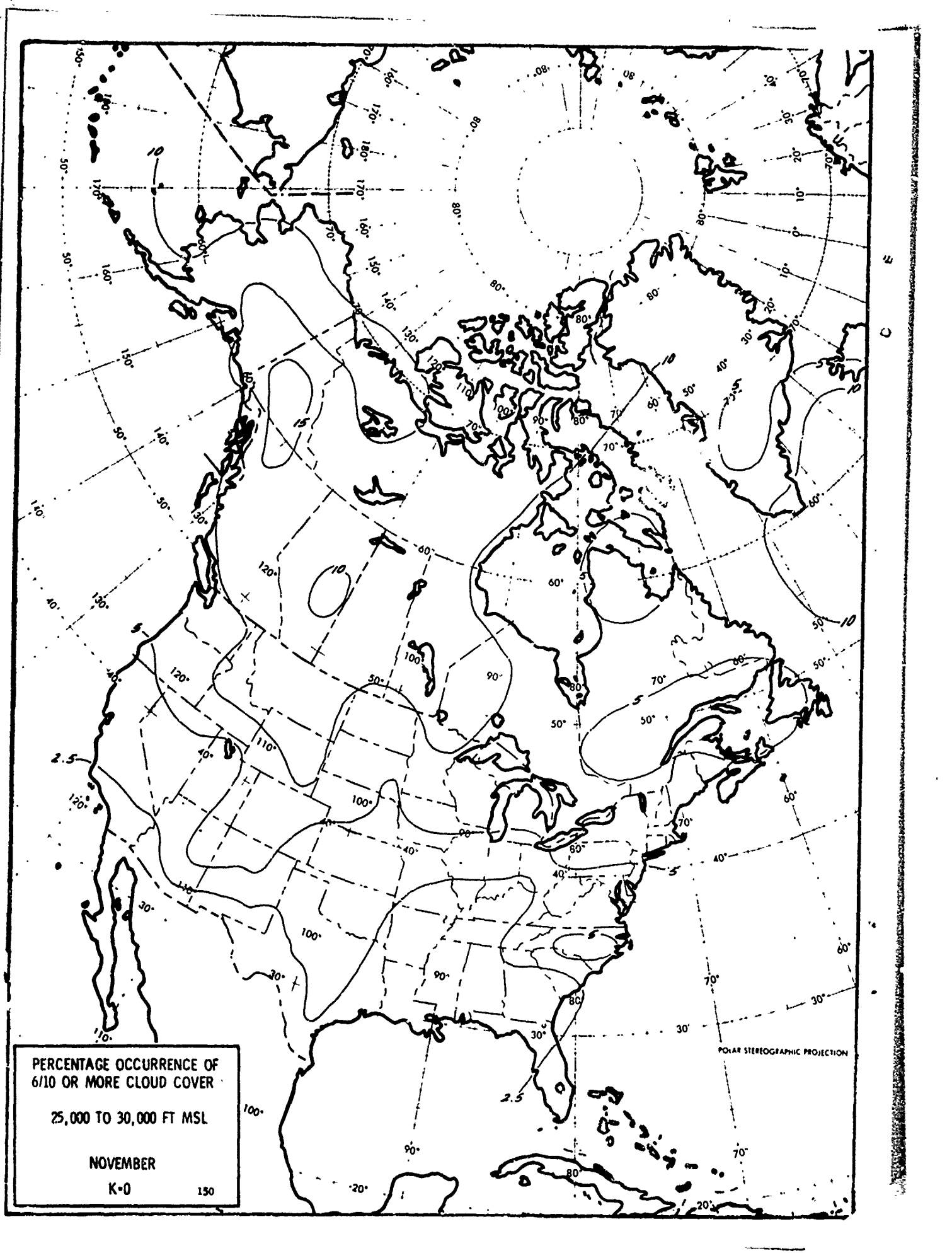
20,000 TO 25,000 FT MSL

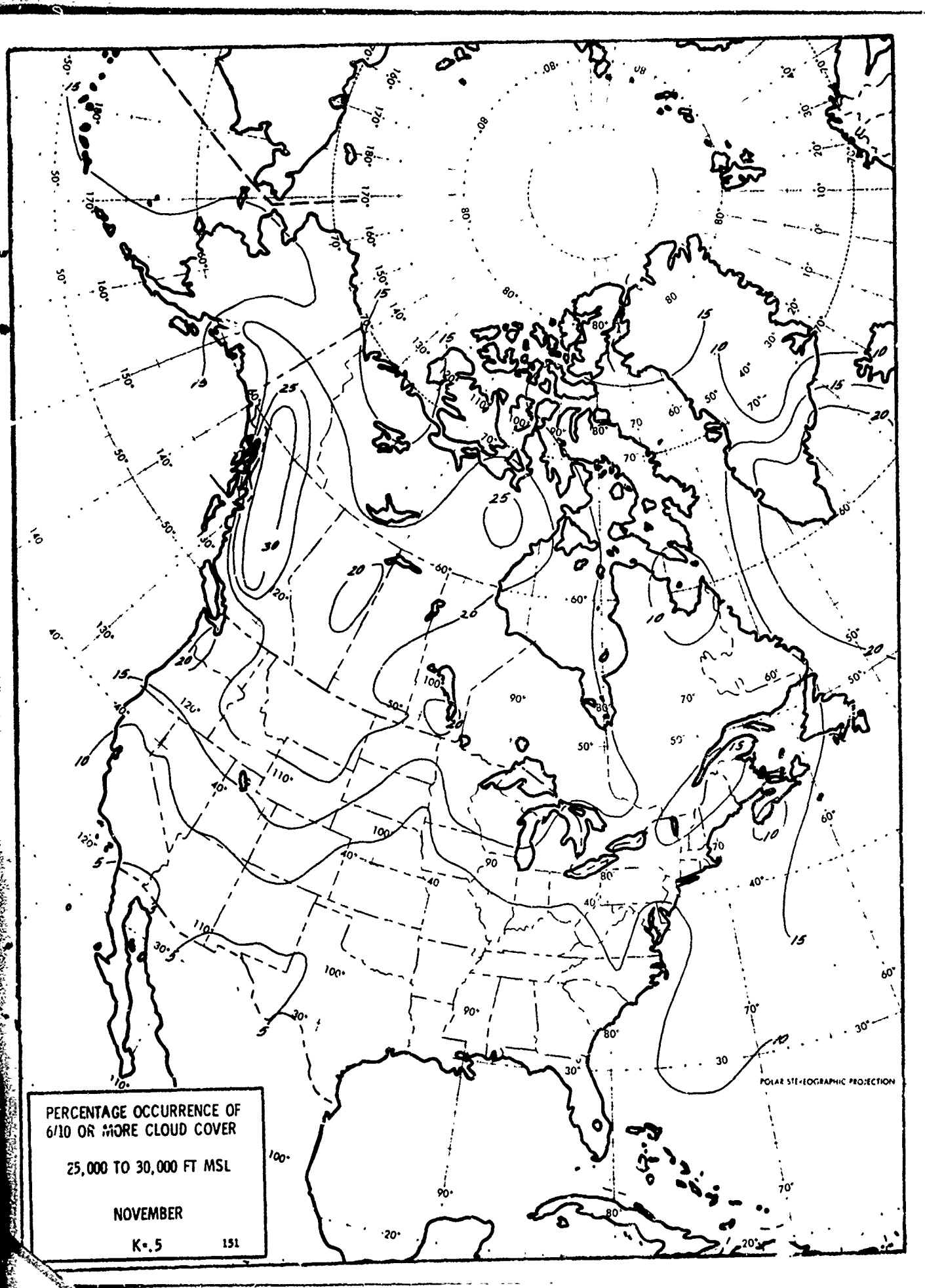
NOVEMBER

K-5

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POLAR STEREOGRAPHIC PROJECTION





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

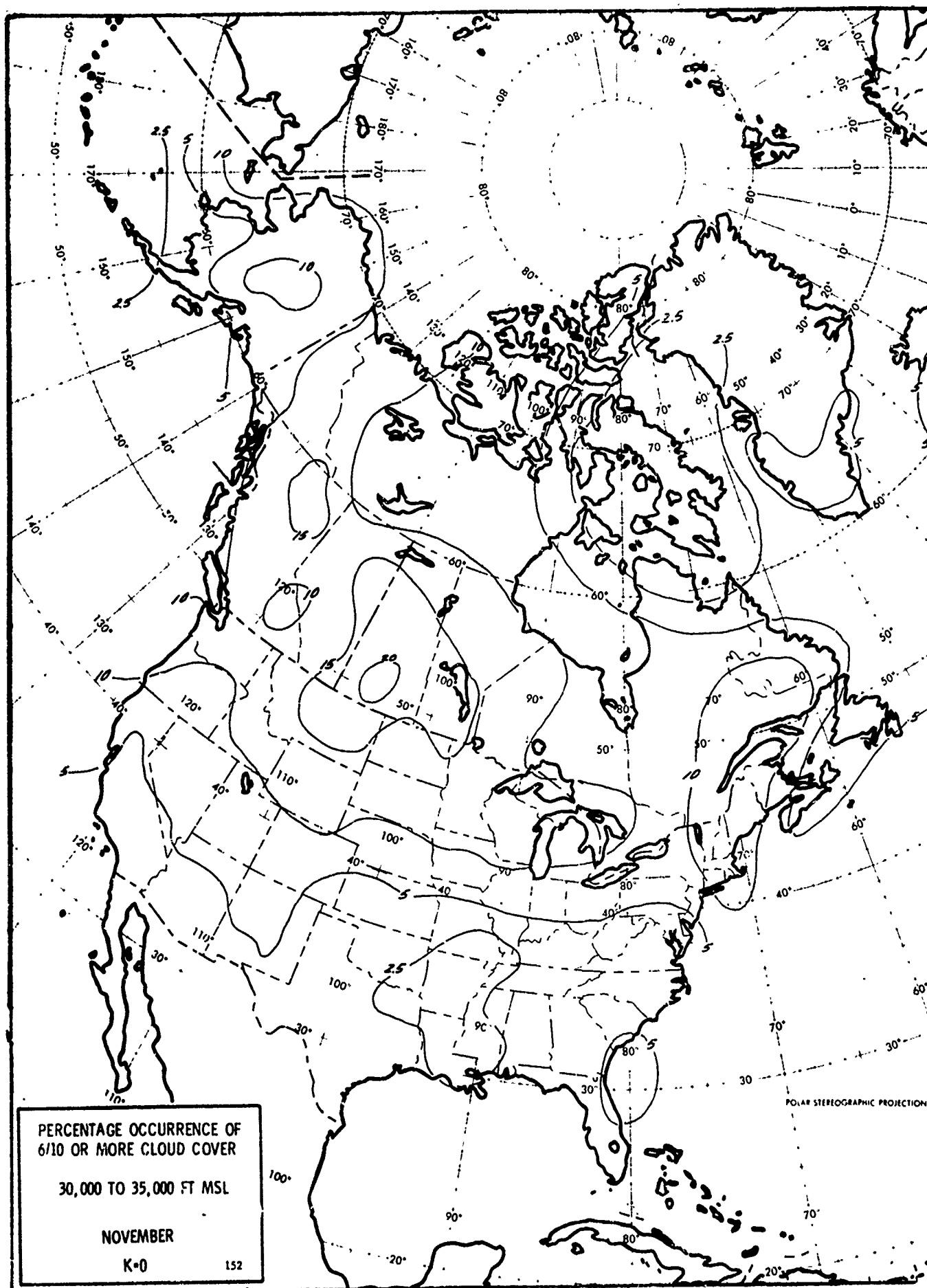
25,000 TO 30,000 FT MSL

NOVEMBER

K-5

151

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

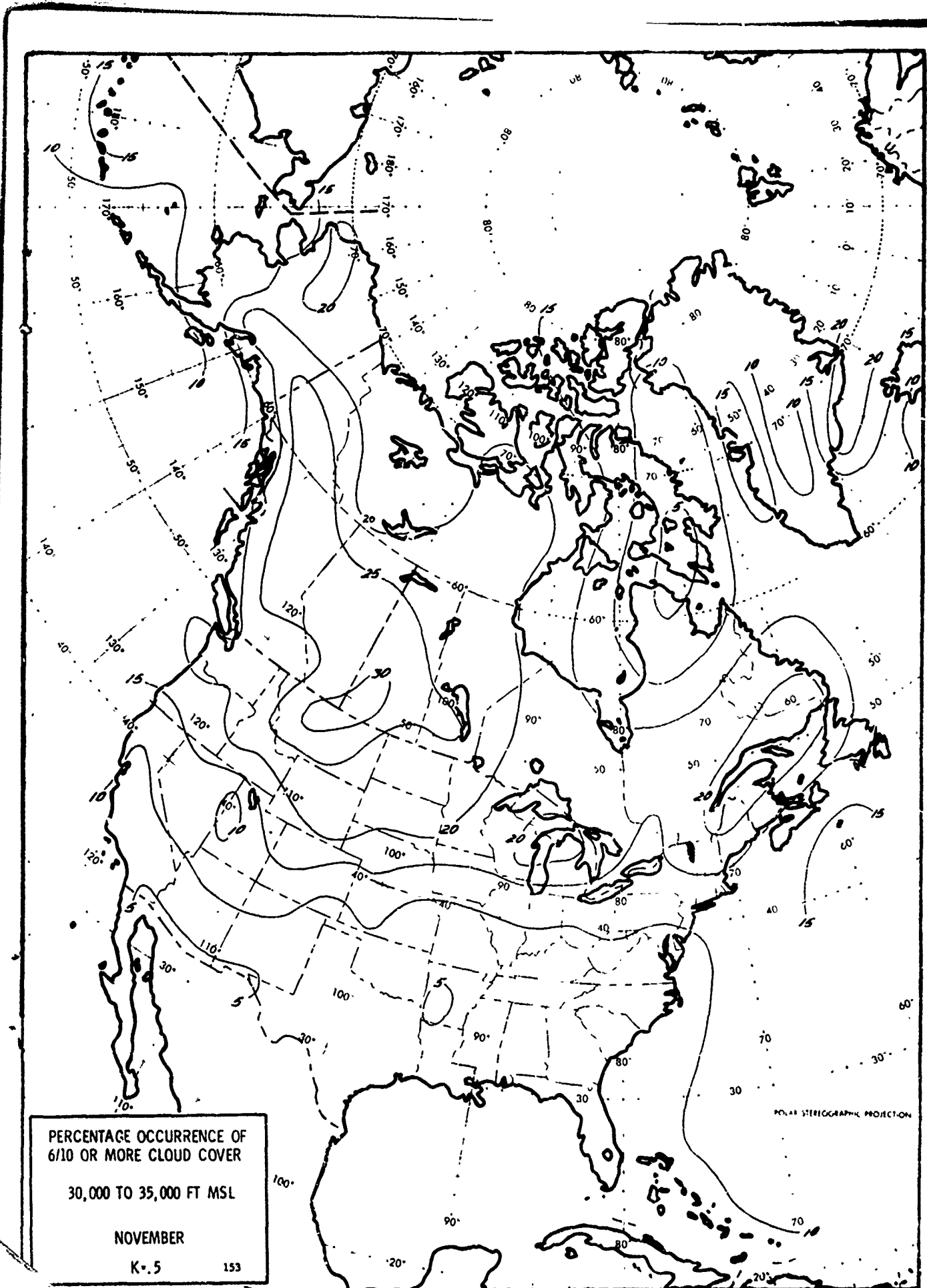
30,000 TO 35,000 FT MSL

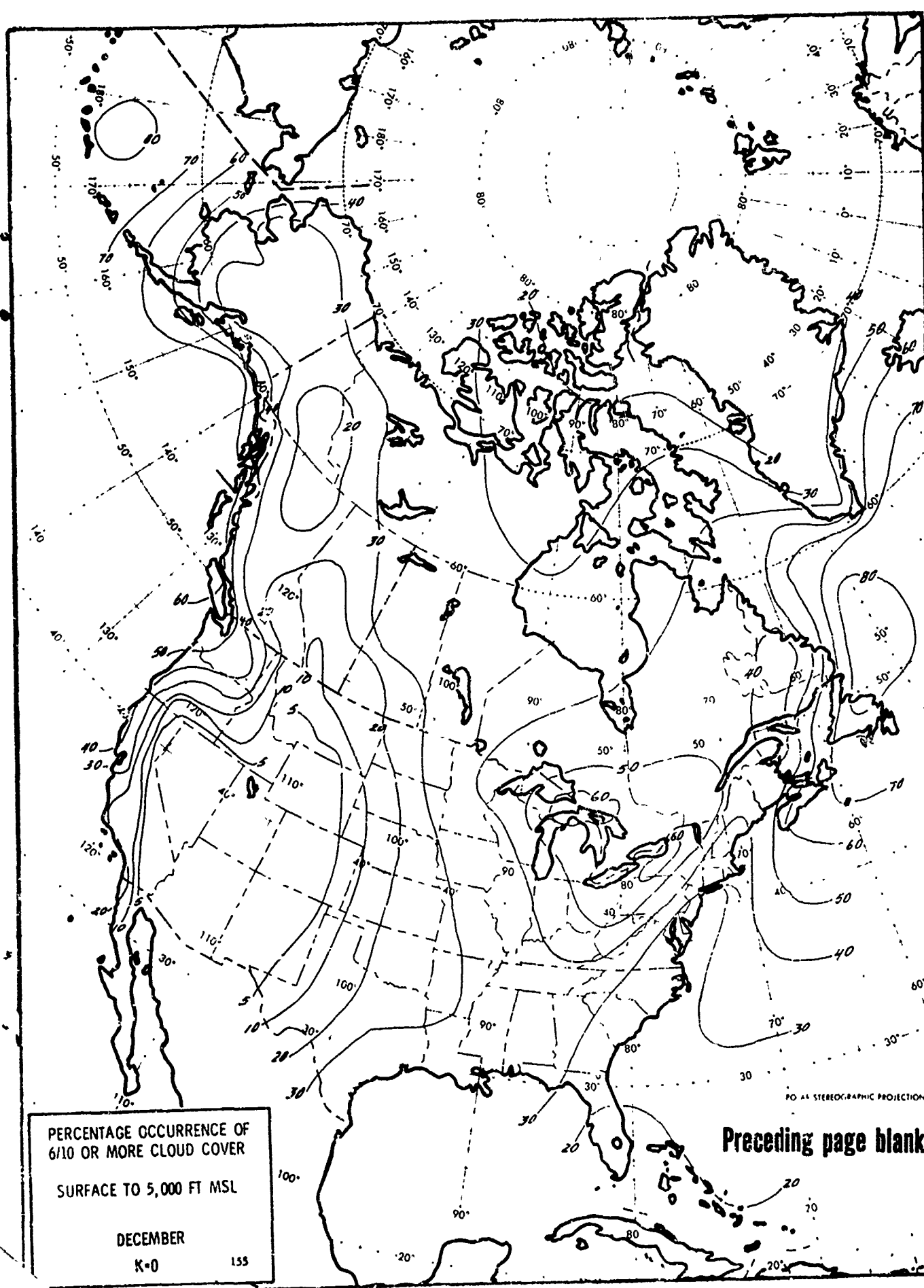
NOVEMBER

K=5

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POLAR STEREOGRAPHIC PROJECTION





PO AS STEREOGRAPHIC PROJECTION

PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

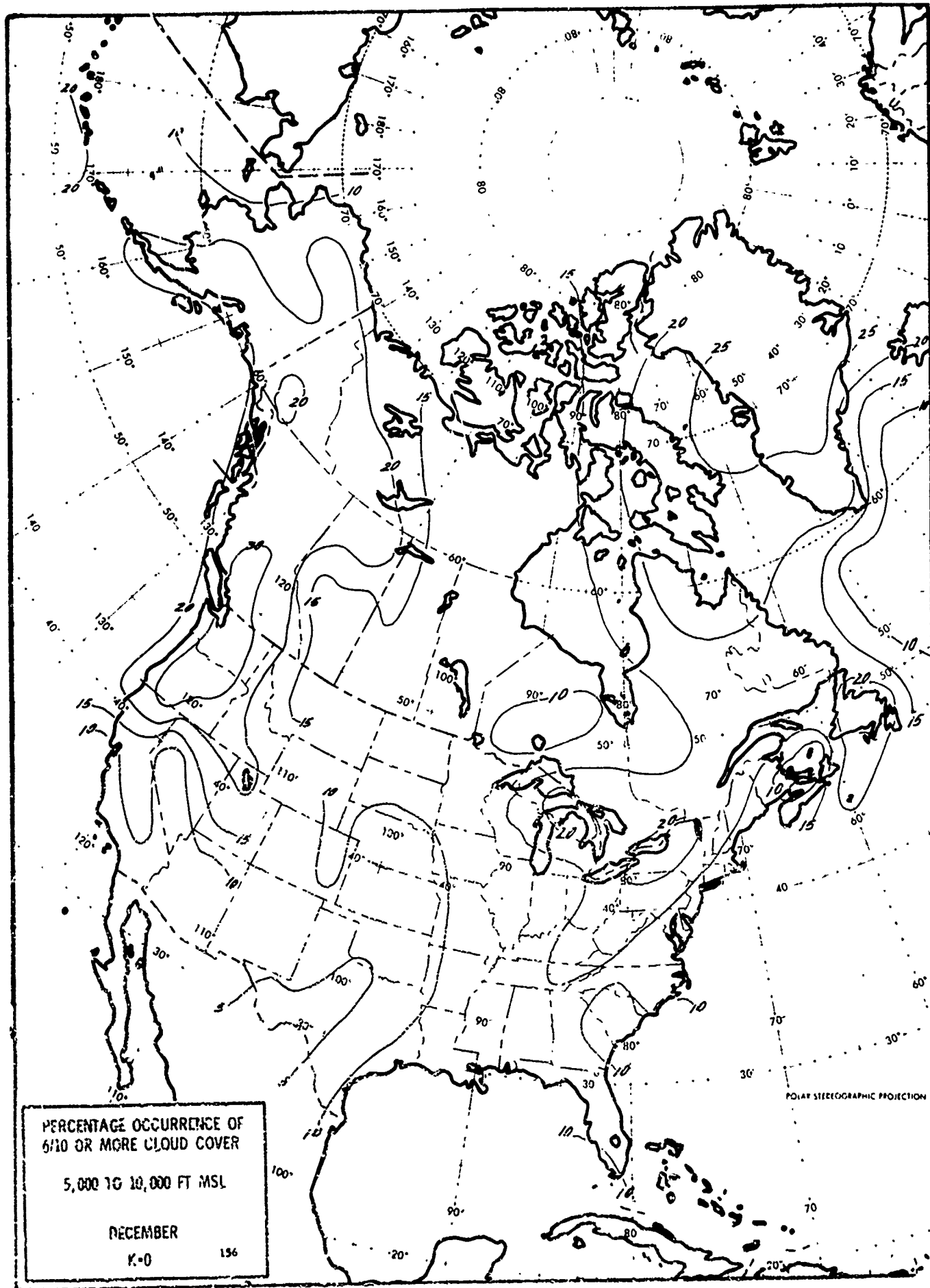
SURFACE TO 5,000 FT MSL

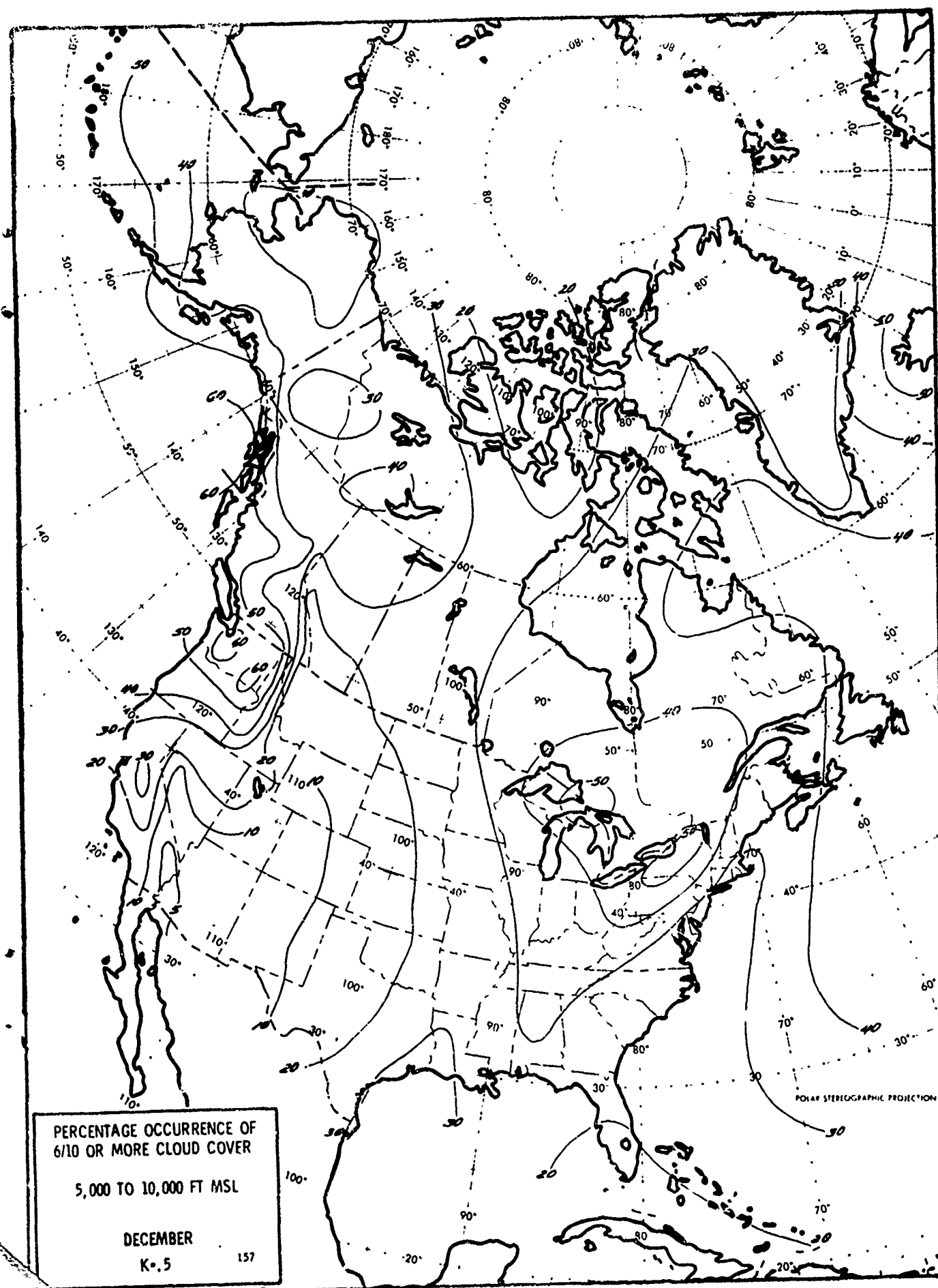
DECEMBER

K-0

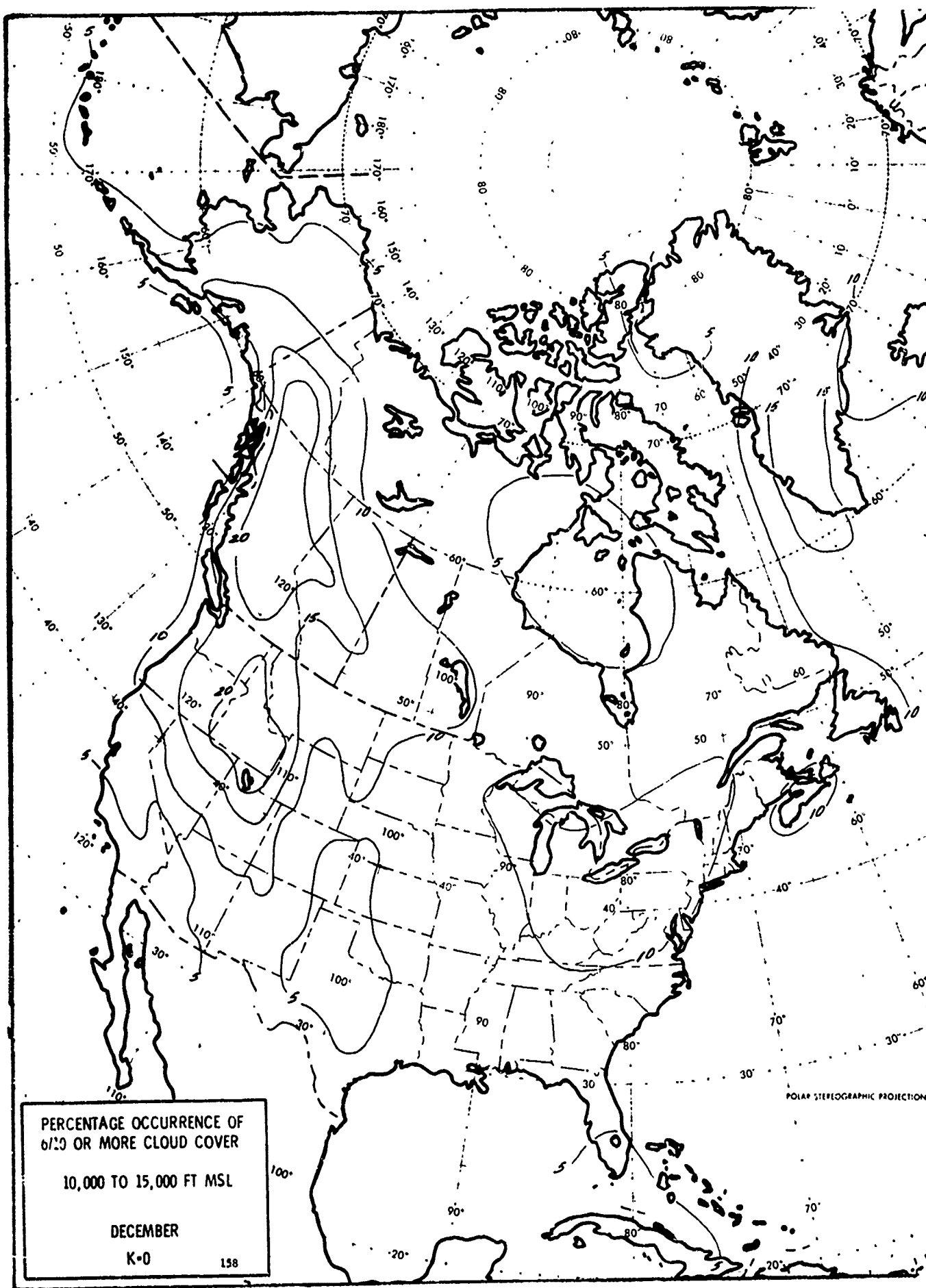
155

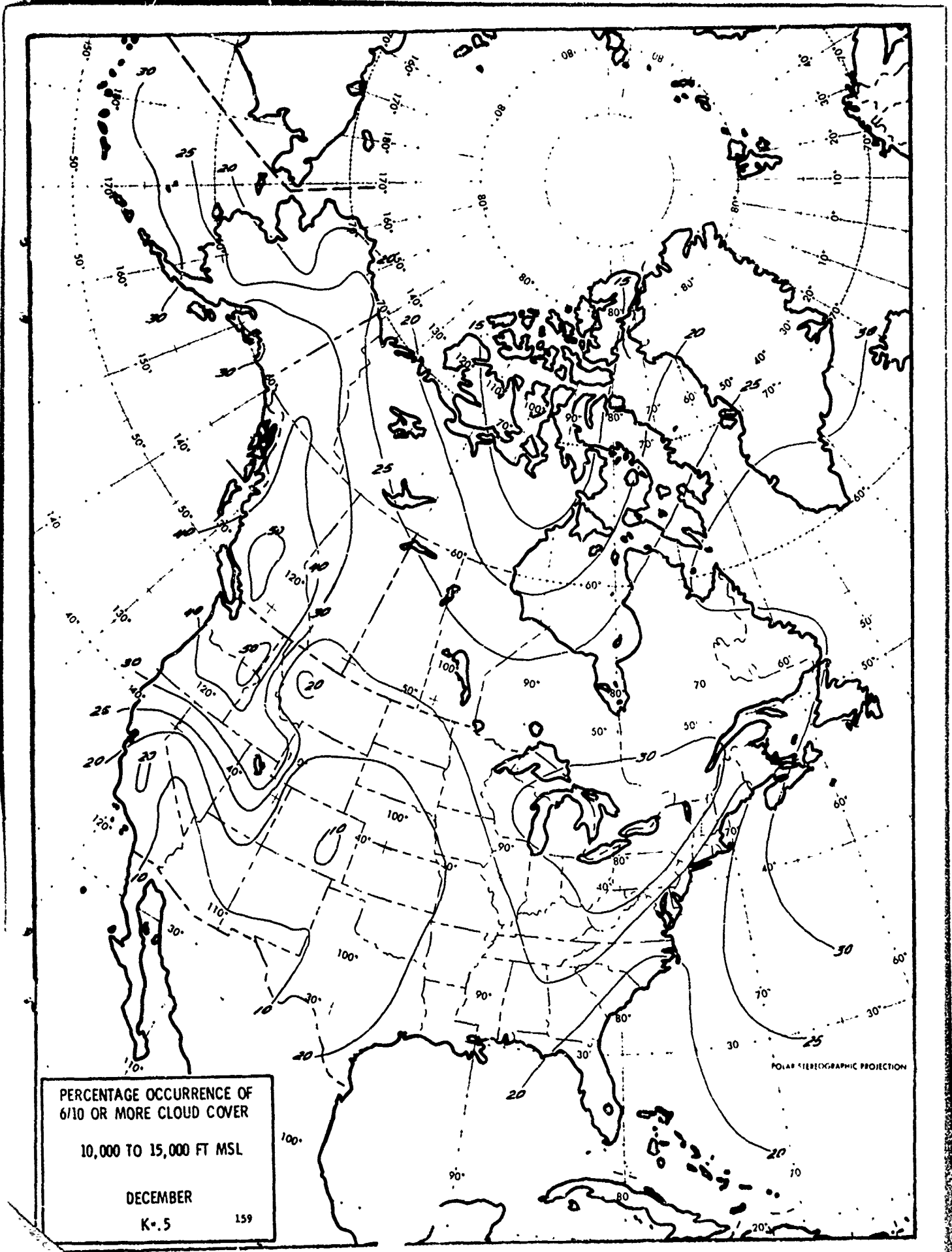
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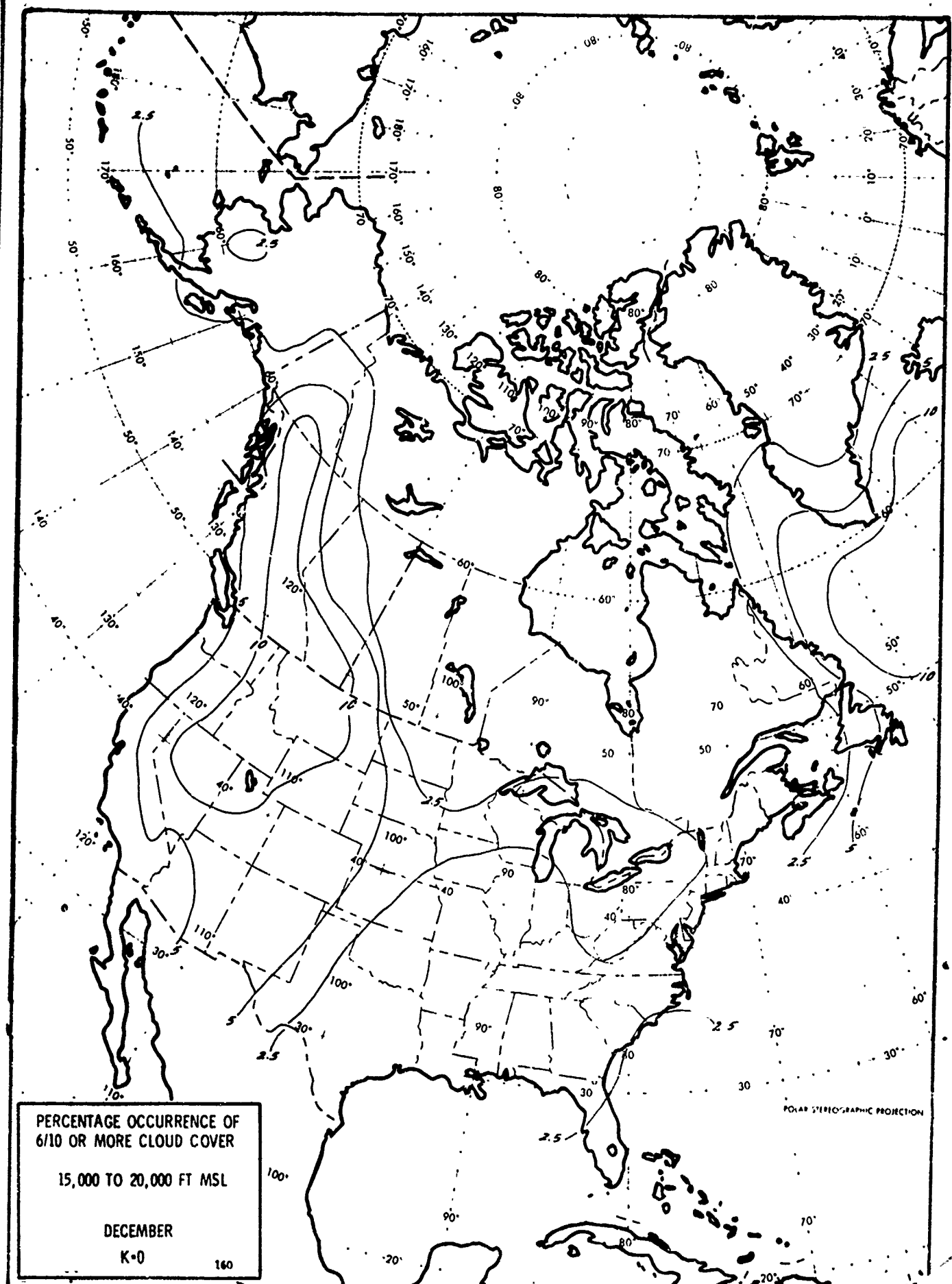
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER
5,000 TO 10,000 FT MSL
DECEMBER
K-5 157





PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER
10,000 TO 15,000 FT MSL
DECEMBER
K-5 159

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

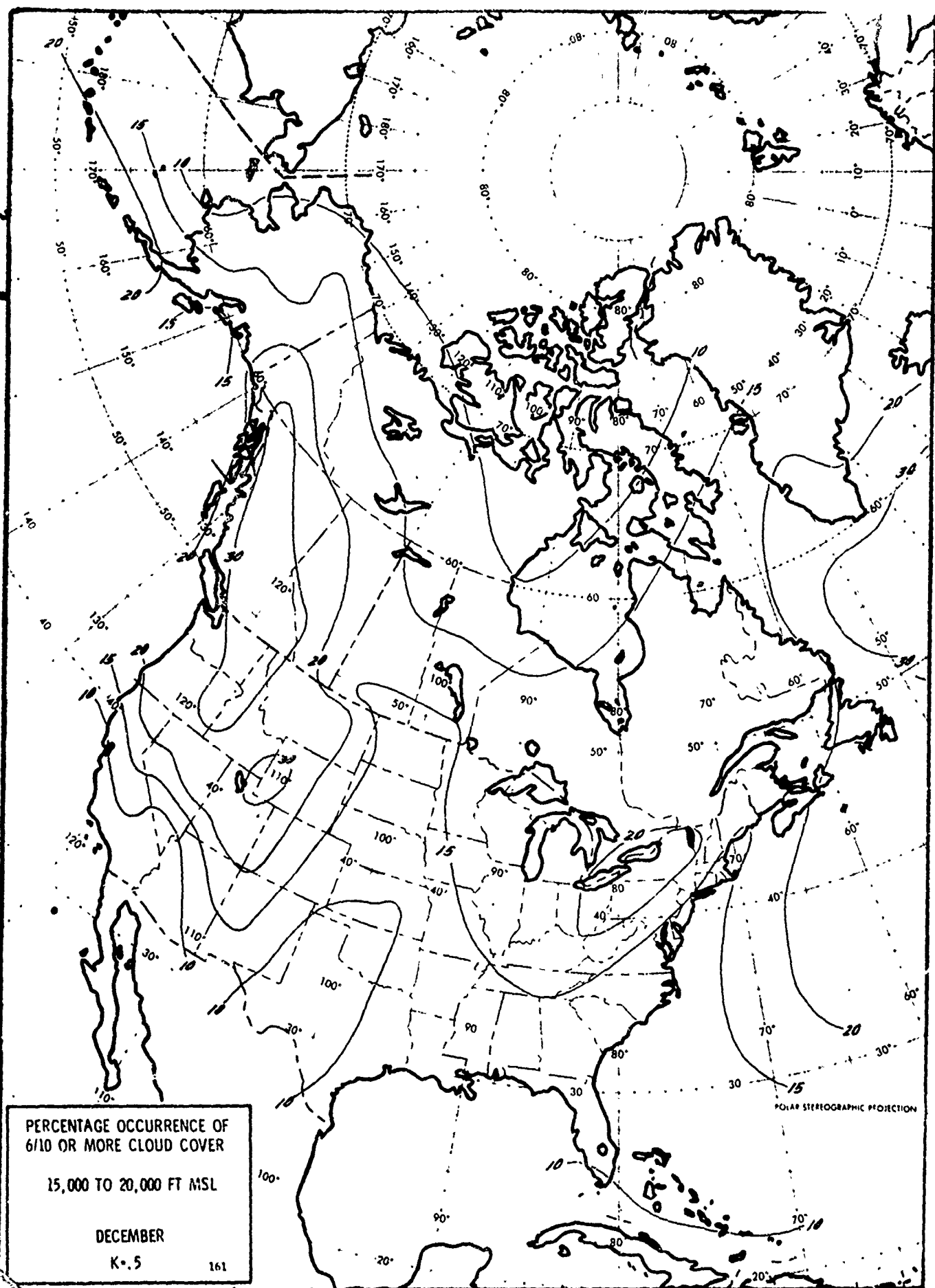
15,000 TO 20,000 FT MSL

DECEMBER

K-0

160

POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

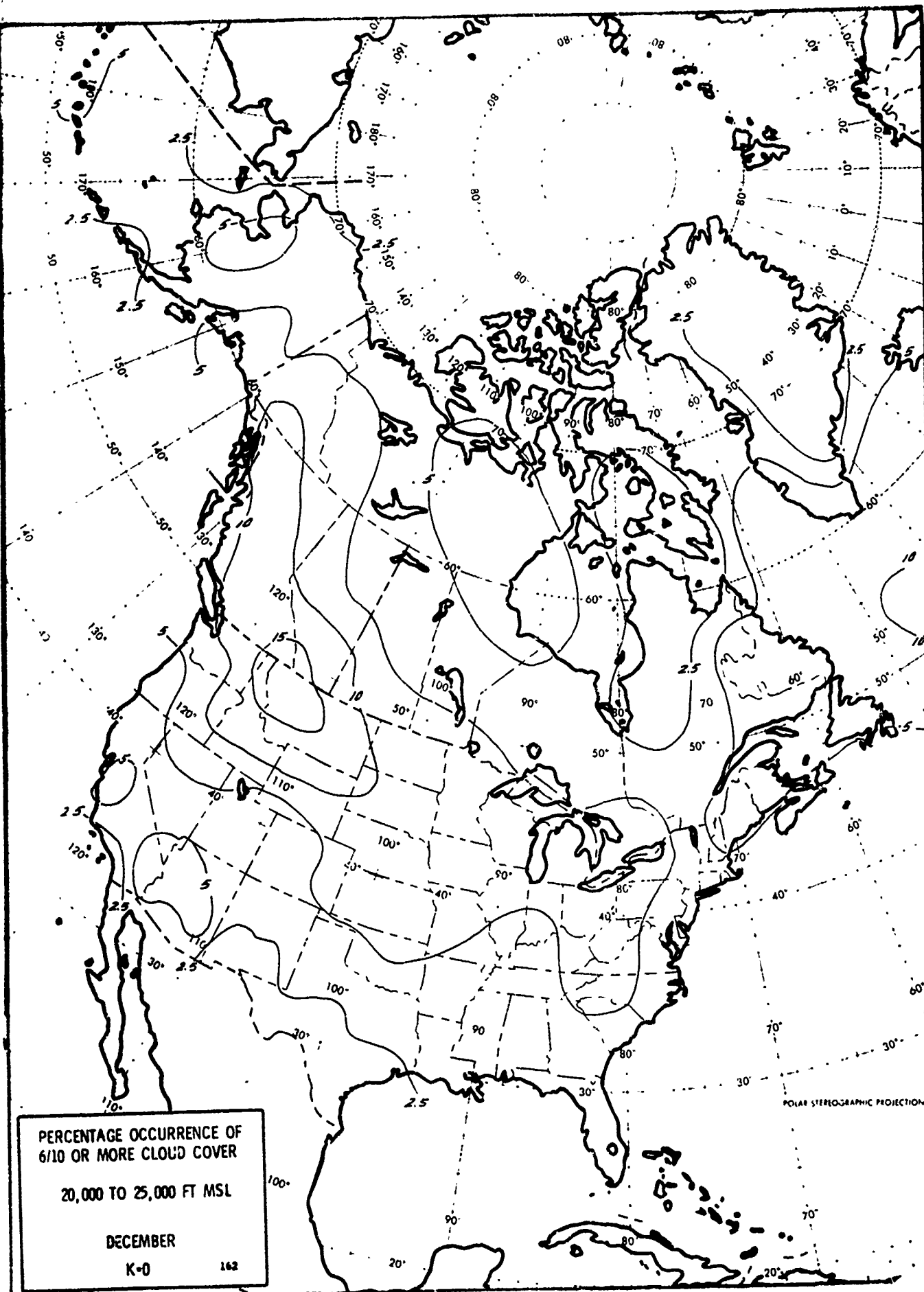
15,000 TO 20,000 FT MSL

DECEMBER

K-5

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POLAR STEREOGRAPHIC PROJECTION



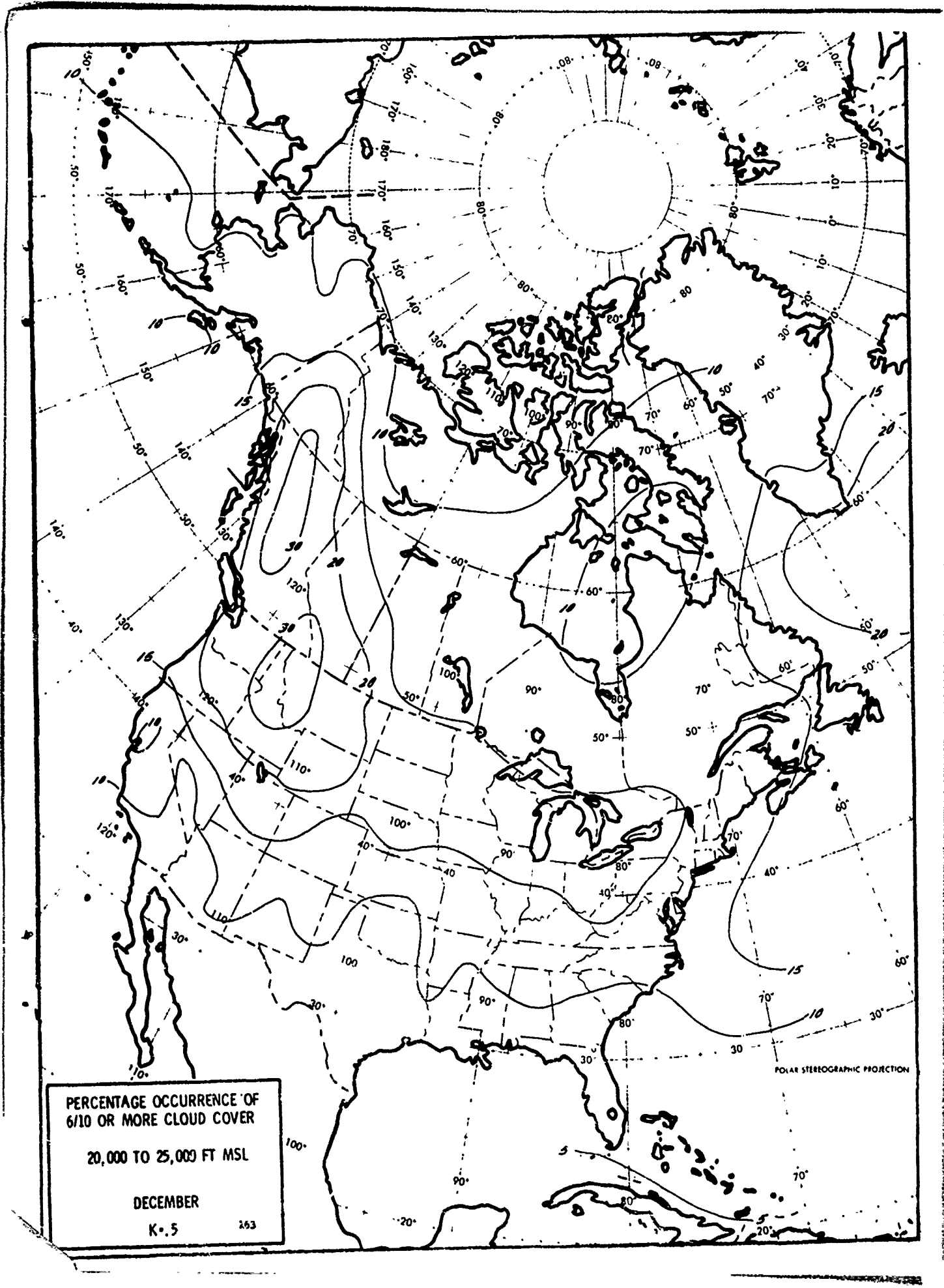
PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

20,000 TO 25,000 FT MSL

DECEMBER

K-0

162



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

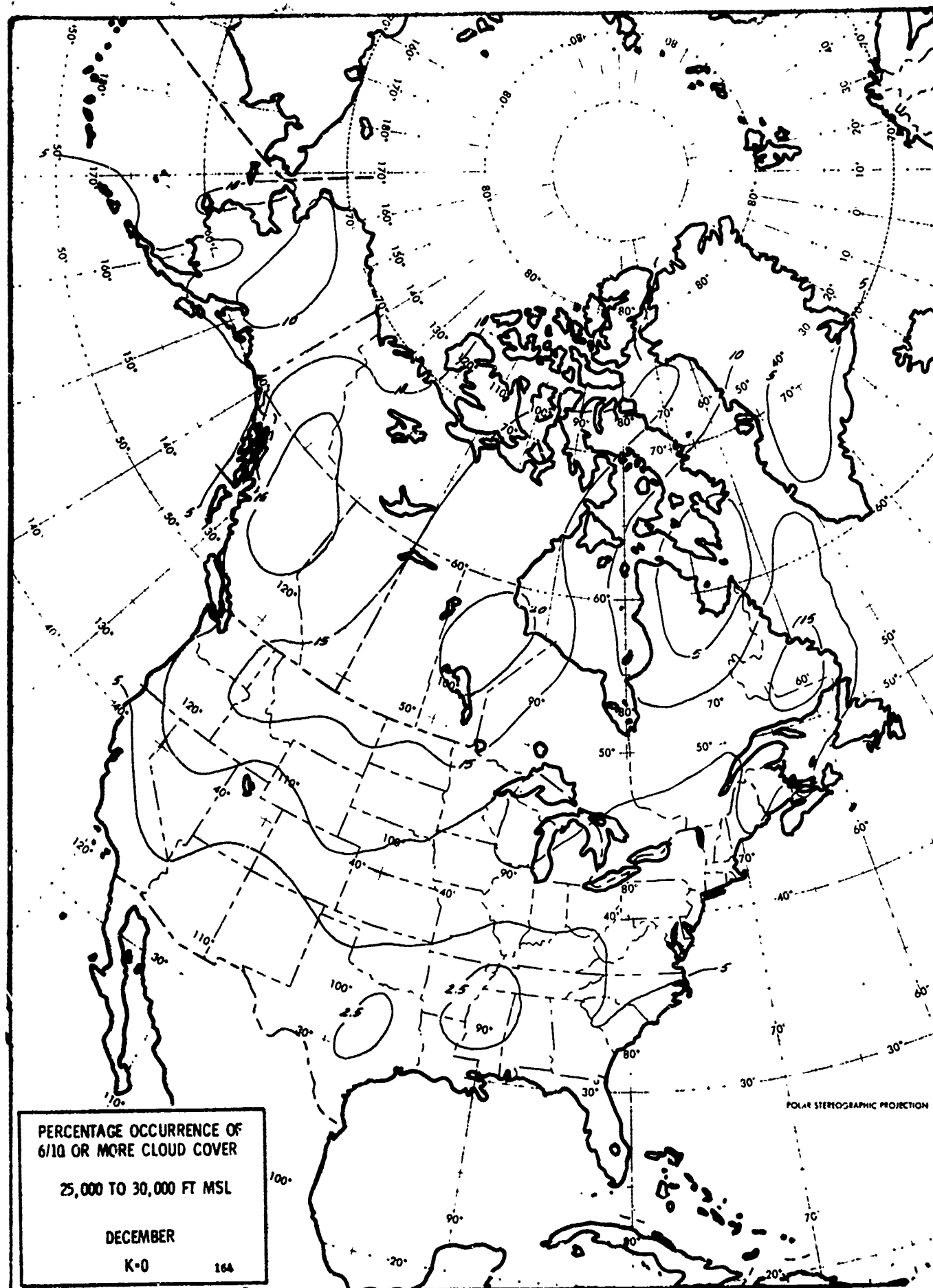
20,000 TO 25,000 FT MSL

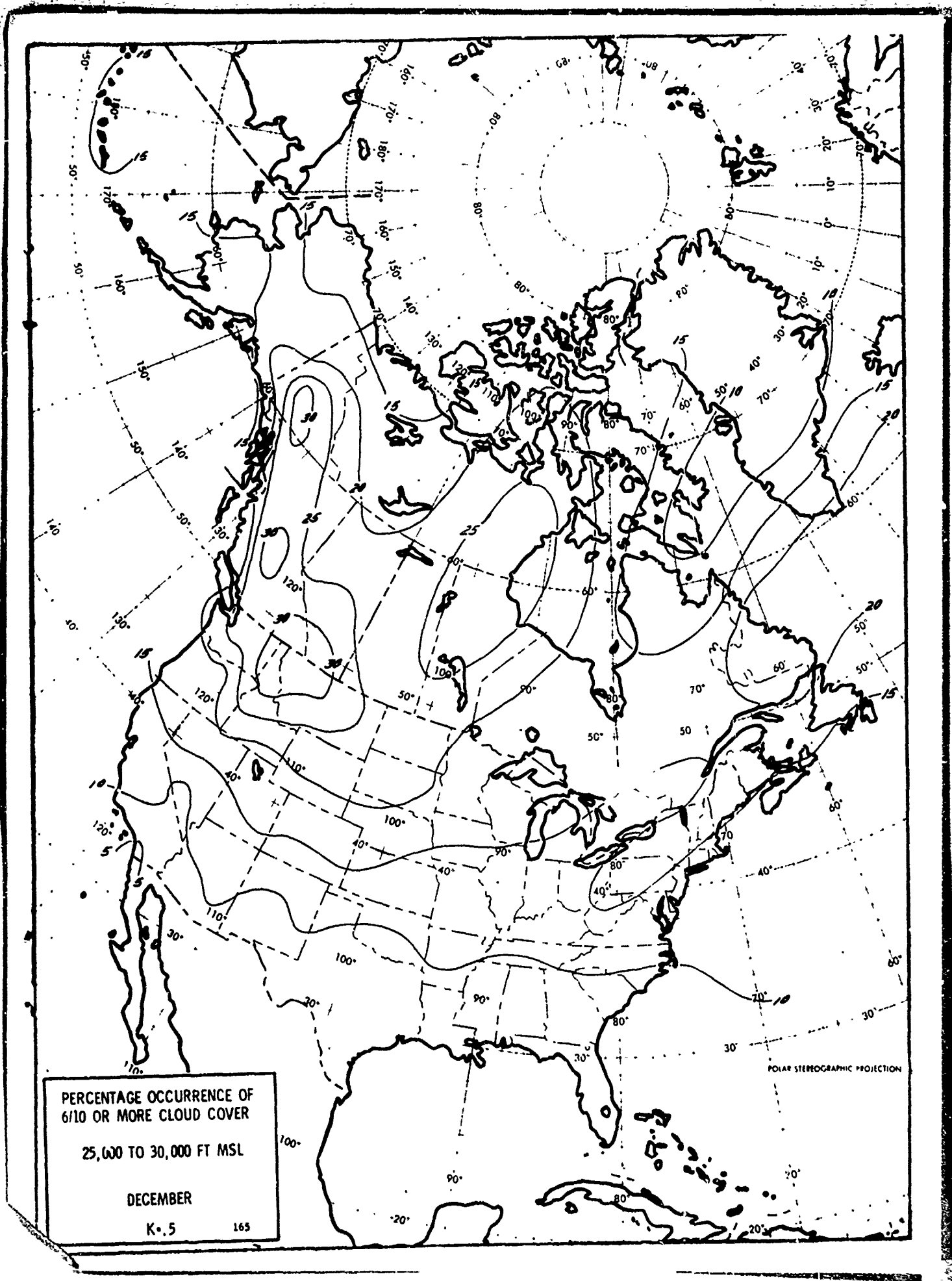
DECEMBER

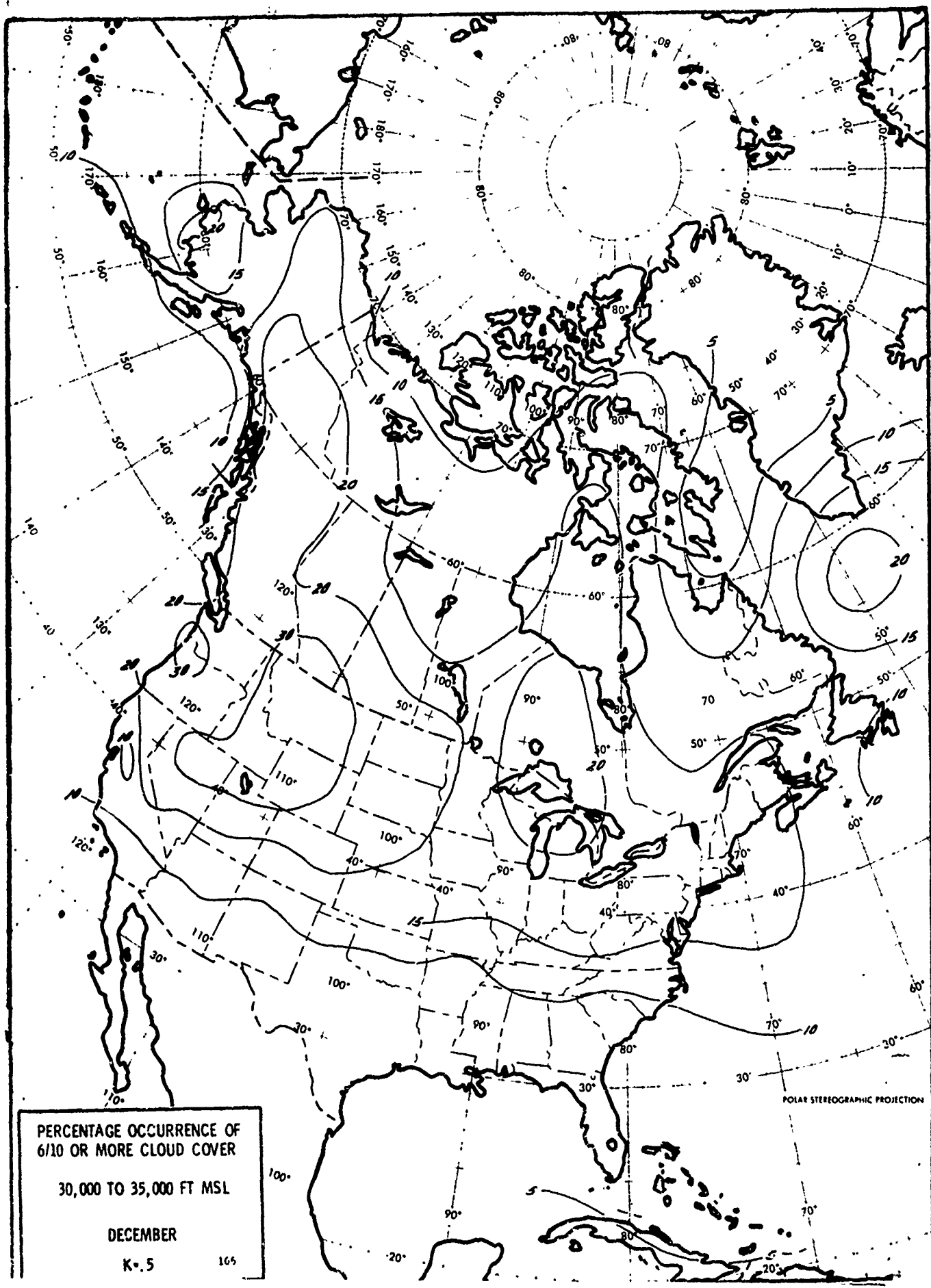
K=5

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POLAR STEREOGRAPHIC PROJECTION







PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

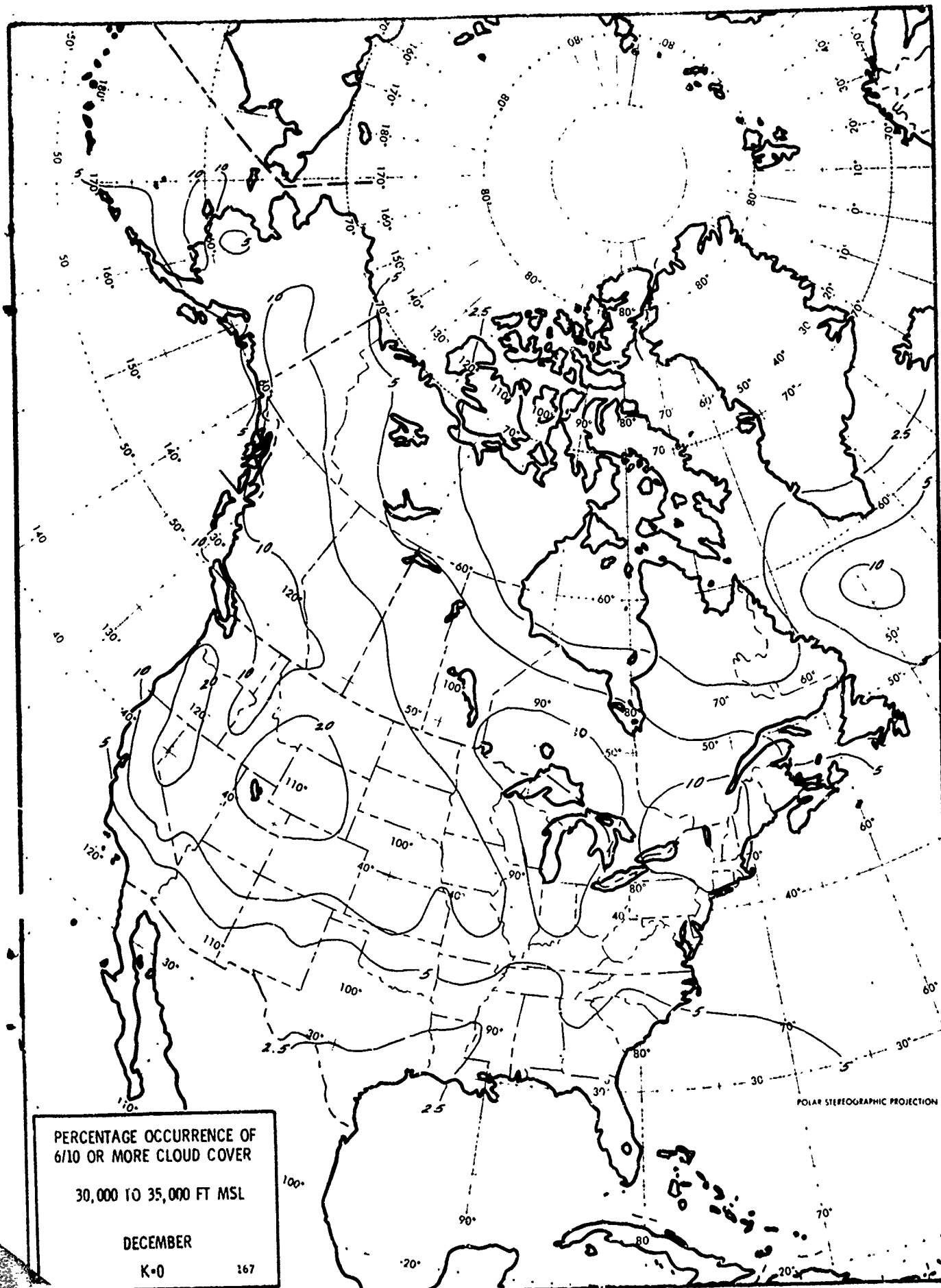
30,000 TO 35,000 FT MSL

DECEMBER

K. 5

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POLAR STEREOGRAPHIC PROJECTION



PERCENTAGE OCCURRENCE OF
6/10 OR MORE CLOUD COVER

30,000 TO 35,000 FT MSL

DECEMBER

K=0

167