

Cryptoquip

Date: October 11, 2013

This is a passage enciphered using a substitution cipher in which each letter is replaced by another:

```
J I Z W   R   C B Z V X L X V   R L Q X V R W
Q Z B N T U X V   I R C   B Q Z M M K   I G M
J Z R M I Z Q ,   X M   V G N U A   T Z   R
W X W Z M K - A Z F Q Z Z   R W F G U R.
```

Hint: Z equals E

This puzzle is taken from CryptoClassics, ©2002 by King Features Syndicate. The date of this puzzle is unknown.

Answer

In what follows, CAPITAL LETTERS are the ciphertext and lower case letters are the plaintext.

```
J I Z W   R   C B Z V X L X V   R L Q X V R W
Q Z B N T U X V   I R C   B Q Z M M K   I G M
J Z R M I Z Q ,   X M   V G N U A   T Z   R
W X W Z M K - A Z F Q Z Z   R W F G U R.
```

From the hint, we have:

Z equals e

```
J I e W   R   C B e V X L X V   R L Q X V R W
Q e B N T U X V   I R C   B Q Z M M K   I G M
J e R M I e Q ,   X M   V G N U A   T e   R
W X W e M K - A e F Q e e   R W F G U R.
```

Note R is a single letter word. That means it is a or i. It ends the last word in the cryptoquip, and more English words end in “a” than “i”. So we guess:

Guess R equals a

```
J I e W   a   C B e V X L X V   a L Q X V a W
Q e B N T U X V   I a C   B Q e M M K   I G M
J e a M I e Q ,   X M   V G N U A   T e   a
W X W e M K - A e F Q e e   a W F G U a.
```

Look at the first word. It begins the passage, the next word is “a”, and there is a comma before there is a period. So, the first word probably introduces a clause, and would be a conjunction. The word “when” comes to mind. Let’s try it:

Guess JIeW equals when

```
w h e n   a   C B e V X L X V   a L Q X V a n
Q e B N T U X V   h a C   B Q e M M K   h G M
w e a M h e Q ,   X M   V G N U A   T e   a
n X n e M K - A e F Q e e   a n F G U a.
```

The first word in the third line is almost certainly “weather”:

Guess weaMheQ equals weather

```
w h e n   a   C B e V X L X V   a L r X V a n
r e B N T U X V   h a C   B r e t t K   h G t
w e a t h e r ,   X t   V G N U A   T e   a
n X n e t K - A e F r e e   a n F G U a.
```

The first word in the third line is almost certainly “weather”:

Guess weaMheQ equals weather

```
w h e n   a   C B e V X L X V   a L r X V a n
r e B N T U X V   h a C   B r e t t K   h G t
w e a t h e r ,   X t   V G N U A   T e   a
n X n e t K - A e F r e e   a n F G U a .
```

The first word in the last line looks like “ninety”:

Guess nXnetK equals ninety

```
w h e n   a   C B e V i L i V   a L r i V a n
r e B N T U i V   h a C   B r e t t y   h G t
w e a t h e r ,   i t   V G N U A   T e   a
n i n e t y - A e F r e e   a n F G U a .
```

The third word in the second line can only be “pretty”:

Guess B equals p

```
w h e n   a   C p e V i L i V   a L r i V a n
r e p N T U i V   h a C   p r e t t y   h G t
w e a t h e r ,   i t   V G N U A   T e   a
n i n e t y - A e F r e e   a n F G U a .
```

The last word in the second line could be “hat”, “hit”, “hot”, or “hut”. Between “pretty” and “weather”, only “hot” makes sense. So:

Guess G equals o

```
w h e n   a   C p e V i L i V   a L r i V a n
r e p N T U i V   h a C   p r e t t y   h o t
w e a t h e r ,   i t   V o N U A   T e   a
n i n e t y - A e F r e e   a n F o U a .
```

As the passage talks about weather, “ninety” is probably a temperature. So the word following the “ninety” is likely to be “degree”:

Guess AeFree equals degree

```
w h e n   a   C p e V i L i V   a L r i V a n
r e p N T U i V   h a C   p r e t t y   h o t
w e a t h e r ,   i t   V o N U d   T e   a
n i n e t y - d e g r e e   a n g o U a .
```

In the third line, the words after “it” probably are “could be” or “would be”. On the first line, the third word ends in V, so V is probably c and not w:

Guess VoNUd Te equals could be

```
w h e n   a   C p e c i L i c   a L r i c a n
r e p u b l i c   h a C   p r e t t y   h o t
w e a t h e r ,   i t   c o u l d   b e   a
n i n e t y - d e g r e e   a n g o l a .
```

The last word on the first line is undoubtedly “african”:

Guess L equals f

```
w h e n   a   C p e c i f i c   a f r i c a n
r e p u b l i c   h a C   p r e t t y   h o t
w e a t h e r ,   i t   c o u l d   b e   a
n i n e t y - d e g r e e   a n g o l a .
```

The third word on the first line has to be “specific”:

Guess C equals s

```
w h e n   a   s p e c i f i c   a f r i c a n  
r e p u b l i c   h a s   p r e t t y   h o t  
w e a t h e r ,   i t   c o u l d   b e   a  
n i n e t y - d e g r e e   a n g o l a .
```

Thus, the passage is:

When a specific African republic has pretty hot weather, it could be a ninety-degree Angola.