Puzzled Pint

DECEMBER 2019

YIPPEE YAPPY

HANS: *Mr. McClane has been particularly chatty on the radio. It appears he is using some sort of code. What is it he's always saying…*

THEO: ***Yippee ki yay**?*

HANS: *That's it. He is a bit of a... well, you know.*

Each radio encodes its input. If you study the output, perhaps you can help Hans and Theo reconstruct the original message.

Each radio reorders the left-hand inputs according to a specific rule. By comparing how it transforms the top input, you can reconstruct the bottom input.

Reverse the output

Y I P P E E K I Y A Y → Y A Y I K E E P P I Y

C H A N G E / I N P U T → T U P N I E G N A H C

Reconstructing the input gives a set of instructions.

First, convert the top inputs to base three:

**012, 210, 022, 010, 210, 100
= EUHCUI**

Shift the vowels back (ex. E -> A, I -> E, O -> I, etc.)

Y A Y K I Y I P P E E → Y E Y K O Y O P P I I

T O / B A S E / T H R E E → T U B E S I T H R I I

Then shift back six positions in the alphabet:

= YOBWOC

Vowels have been moved to the end (but stay in order).

Y I P P E E Y A Y Y A Y → Y P P Y Y Y Y I E E A A

Y I P P E E / I S / Z E R O → Y P P S Z R I E E I E O

Finally reverse the word

= COWBOY

Take the first letter of the output, then the last, then the second letter, then second-last, etc.

Y I P P E E K I Y I P P E E → Y P E K Y P E E P I I E P I

K I / E Q U A L S / O N E / E T C → K E U L O E T C E N S A Q I

Shift every second letter forward 1

Y A Y K I Y I P P E E → Y Z Y J I X I O P D E

S H I F T / B A C K / S I X → S G I E T A A B K R I W

Swap every pair of letters

K I Y I P P E E Y I P P E E → I K I Y P P E E I Y P P E E

R E V E R S E / T H E / W O R D → E R E V S R T E E H O W D R