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 To the tune of "To Anacreon in Heaven"

A  
 Oh, say, PGP, and RSA public key  
 A A<sub>2</sub> A E A A B E  
 Cryptosystems are simple, with primes  $q$  and  $p$ ;  
 A A<sub>2</sub> A B E  
 Call the product of one less than each of them  $k$   
 A A<sub>2</sub> A E A  
 I pick  $d$  and  $e$ , whose product is 1 mod  $k$ .

A A<sub>4</sub> A A<sub>4</sub> A E A E7  
 Now I just publish  $d$ , and the product  $qp$ ,  
 A A<sub>2</sub> A E7 A B E  
 You raise  $d$  to the power of message block  $b$ ;  
 A E A EA DEA E  
 Take that modulo  $pq$  and send it to me.  
 A E A D A E A D E7 A  
 And I'll use it as the exponent of private key  $e$ .

Now this program can fit into three lines of code,  
 Using `perl` and `dc`, though the logic's distorted.  
 Cryptographic machines are a weapon of war,  
 And the government says they must not be exported.

Make a barcoded card, or if you are a bard  
 run the code through a modem, it's not very hard.

*Now, if I were being mean I'd stick some modem tones in here*

Then this song would be a munition, its music you could never take  
 From the land of the free, and the home of the brave.

The description of the RSA public key cryptography algorithm is mathematically accurate; though it's worth noting that any practical implementation will do the exponentiation and modules in a single operation. Perhaps the only obscure point occurs when specifying that  $de \equiv 1 \pmod{(p-1)(q-1)}$ . The twisted phraseology that defines  $k$  as  $(p-1)(q-1)$  is particularly kludgy, but what the hell, it scans.

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 HyperSpace Express 19950605 from Steve Savitzky's songbook