

/ ei ch/K \c`YWc]bYf/ ei ch/!5XfYggYb'a ]h  
a Y\f`U`g`%`6]hWc]b`gY]h`&\$%\*`j`YfXcddY`h

@Ui h`XYa`C b!7\U]b!5bU`m]Wg!5bV]YhYf';`UggbcXY`[ ]Vh`Yg  
ZUgh`Y]bY`A ]``cb`5XfYggYbž`X]Y`a Y\f`U`g`Y]bYb`6]hWc]b  
VYg]hnYb``Ni XYa` \Uh'g]W`X]Y`NU\`XYf`  
K \c`YWc]bYf`!5XfYggYb`gY]h`Yhk U`A ]hhY`&\$%\*`j`YfXcddY`h`  
K`A\fYbX`XYg`<Ö\Ydi b`hg`XYg`Y`hnhYb`Nm`i`g`YffY]W`hY`Yg  
Y]b`D`UhYUi`j`cb`\_bUdd`ØVYf',`\$\$`\$\$\$`5XfYggYbž`gh]Y[ `UVYf`  
k`A\fYbX`XYg`Nm`i`gh]Y`Zg`9bXY`&\$&&`i`bX`V]g`&\$&'`Ubž`U`g  
g]W`X]Y`ϕj`Yghc`fYb`UbgUa`a`Y`hYb``8]YgY`GhUh]gh`\_`]gh  
VYa`Yf`\_Ybgk`Yfhž`XU`Yg`k`Y`hk`Y]h`a`Y\f`U`g`)`\*`A ]``cbYb  
A ]``cb`ÄfY`[ ]Vh``8U`6H7`YXcW`VY]`Yhk`U`&`,`\$\$\$`~`[ Y\UbXY`h`  
k`]fXž`k`]fX`Yg`bcW`Y]b][`Y`NY]h`XUi`Yfbž`V]g`Yg`Y]bg`[ ]Vh`Wc]b  
k`]fX`Y]bYb`ϕ\UVYf`ni`a`A ]``cb`Äf`a`UW`Yb``6]bUbW`!79C  
7\Ub[`dYb[`/`Ua`d^Y``d/`



@Ui h`XYa`C b!7\U]b!5bU`m]Wg!5bV]YhYf';`UggbcXY`[ ]Vh`Yg`ZUgh  
Y]bY`A ]``cb`5XfYggYbž`X]Y`a Y\f`U`g`Y]bYb`6]hWc]b`VYg]hnYb`  
Ni XYa` \Uh'g]W`X]Y`NU\`XYf` K \c`YWc]bYf`!5XfYggYb`gY]h`Yhk U`  
A ]hhY`&\$%\*`j`YfXcddY`h`

K À\fybX`XYg`<Ò\Ydi b\_hg`XYg`YhnhYb`Nm\_i`g`YffY]W\hY`Yg`Y]b  
D`UH`Ui`j`cb`\_bUdd`ØVYf`, \$\$\$`5XfYggYbž`gh]Y[ `UVYf`k`À\fybX  
XYg`Nm\_i`gh]YZg`9bXY`&\$\$`i`bX`V]g`&\$\$` `Ubž`U`g`g]W\`X]Y  
⊕j`Yghc`fYb`UbgUa`a`Y`hYb`"

8]YgY`GhUh]gh]\_`]gh`VYa`Yf`\_Ybgk`Yfhž`XU`Yg`k`Y`hk`Y]h`a`Y`\f`U`g`)`\*  
A`j``]cbYb`A`j``]cb`ĀfY`[ `]Vh`"

8U`6H7`Y`XcW`VY]`Yhk`U`&`,`\$\$\$`~`[ `Y\UbXY`h`k`]fXž`k`]fX`Yg`bcW  
Y]b][ `Y`NY]h`XUi`Yfbž`V]g`Yg`Y]bg`[ `]Vh`Wc]b`k`]fX`Y]bYb`⊕\UVYf`ni`a  
A`j``]cb`Āf`a`UW`Yb`°

6]bUbW!79C`7\Ub[ `dYb[ `N\Ucž`XYf`X]YgY`K`cW`Y`C`dZYf`j`cb`:`U`\_Y  
BYk`g`k`i`fXYž`a`UW`hY`X]Y`6YcVUW`hi`b[ `Ua` `\*`"5df]"

9g`[ `]Vh`a`Y`\f`U`g`)`\*`A`j``]cbYb`A`j``]cb`ĀfY`Ui`Z`XYf`K`Y`hi`bX`bi`f`%  
A`j``]cb`A`YbgW`Yb`a`]h`a`Y`\f`U`g`%6]h`Wc]b`"F`YW`bY`bUW`"  
\hdg.##h`Wc`#\_+[ `K`B`hF`n`\_Z`d]W`hk`]hhYf`"Wc`a`#<`\*`gi`⊕`F`\_`&

`7N` `6]bUbW`f4`W`hSV]bUbW`⊕`"5df)``&\$\$`'

6]h`Wc]b!`?`b`U`d`d`\`Y]h`ZØ\`f`h`ni` `B`U`W`Z`f`U[ `Y`

9]bY`k`Y]hYfY`6YcVUW`hi`b[ `ž`X]Y`?`fmdhc!6YZØfk`c`fhYf`[ `YfbY  
a`UW`Ybž`]gh`X]Y`HY]i`b[ `X`Yg`;`YgUa`hUb[ `YV`c`hg`Ub`6]h`Wc]bg`Xi`fW  
X]Y`K`Y`hVYj`Ò`\_Yfi`b[ `"8]Yg`Yb`hgdf]W`h`Yhk`U`\$`ž`\$`&`\*`%`\*`6H7`d`fc  
DYfgcbž`U`gc`X]Y`Yb][ `Ybž`X]Y`a`Y`\f`U`g`Y]bY`VYg]h`hYb`Wc]b`g]b`X  
k`]f`\_]W\`Y]bY`GY`hYb`Y]h`"

8]Y`?`b`U`d`d`\`Y]h`XYg`J`Yfa`Ò[ `Ybgk`Yfhg`a`]h`igY]bYa` `YbX`]W`Yb  
5b[ `YV`ch`k`Uf`hfUX]h]cbY``Y]b`HfY]VYf`XYf`B`U`W`Z`f`U[ `Y``8]Yg`\`Uh`g]W  
]b`ZfØ\`YfYb`Nm`\_`Ybž`X]Y`Xi`fW`<`U`V]Yfi`b[ `gYfY][ `b]ggY`\_`Uh`m`g]Yfh  
k`YfXYbž`XYi`h]W\`[ `YnY][ `h`"

8Ug`b`ĀW`ghY`6]h`Wc]b`<`U`j`]b[ `]ghY\`h`nk`]gW`Yb`5df]`i`bX`A`U]`&\$\$`(  
Ubž`Y`bUW`XYa` `Ui`Z`k`Y`W`Yb`NĀ\`Yf`j`Yfk`]YgYb`k`]fX`"8]Y`U`\_hi`Y`Y  
6`c`W`\_df`Āa`]Y`j`cb`\*`ž&)`6H7`k`]fX`Ui`Z`ž%&)`6H7`\`U`V]Yfhž`k`Ug`X]Y  
5i`g[ `UVY`j`Yff]b[ `Yfhi`bX`XYb`J`Yfa`Ò[ `Ybgk`Yfh`\_bUddYf`a`UW`h`"

8]Y'6]hWc]b!A Āf\_hY` \ UVYb`VYfY]hg`Y]bYb` , VYf[ Ub[ g!`cXYf  
K YbXYdi b\_h`YffY]W hž`k ]Y`j`cb`VYf]W hYh`7fmdhcDchUhc" `K Ybb`g]W  
X]Y` ; YgW ]W hY`fY]a hž`k ]fX`g]W`XYf`Ub[ gUa`Y` ; f]bX`bUW`cVYb  
k U\fgW`Y]b`]W`]b`X]YgYa` `đ\`f`Zc`fhgYhnYb"

8]Y`Y][ Ybh]W`Y`<Ui`ggY!F`U`mY`gc`hY`Ui`ZXUg`<U`V]Yfi`b[ gYfY][ b]g  
Zc`[ Yb`i`bX`]b`XYf`nk`Y]hYb`<Ā`ZhY`XYg`đ\`fYg`&\$&(`ghUhhZ]bXYbž  
k Ybb`a`Ub`g]W`Ui`ZfØ\`YfY`Nm`\_`Yb`j`Yf`UggYb`\_`Ubb"

;`UggbcXY`\Uh[ YfUXY`XYb`6]hWc]b! : i`fW`h!`i`bX`! ; ]Yf!`đXYI`ni  
gY]bYb`7\Ufhg`\]bni [ YZØ[ hž`i`a`X]Y`A`Uf\_hgh]a`a`i`b[ `ni`Yfa`]hY`b  
i`bX`g]Y`a`]h`ZfØ\`YfYb`<ØW`gh!`i`bX`H]Y`ZghghĀbXYb`ni`j`Yf[ `Y]W`Yb"

8]Y`Gh]a`a`i`b[ `VYZ]bXYh]g]W`XYfnY]h]b`Y]bYa`Ni`ghUbX`XYf` ; ]Yf`ž  
bUW`XYa`6]hWc]b`]a`j`Yf[ Ub[ YbYb`A`cbUh`i`a`&) `i` [ Ygh]Y[ Yb`]gh"

K ]f`\UVYb`\_Øfn]W`X]Y`\]bni [ YZØ[ h` 6]hWc]b : YUf`UbX` ; fYXX  
đXYI`ž`XYf`g]W`bi`b`ZYgh]a` ; fYXX!HYff]hcf]i`a`VYZ]bXYh"

K ]fX`X]YgY`F`U`mY`di`g`Yb`~`6H7`]b`YI`hfYa`Y` ; ]Yf`k`]Y`&\$%-`i`bX  
&\$&%3

CXYf`j`cb`K`]XYfghĀbXYb`k`]Y`A`Āfn`&\$&\$`cXYf`XYa  
GW`i`X`YbUVVUi`&\$&&ØVYfk`Ā`h][`h`k`YfXYb3

\hdg.##h"Wc#, -k (-l`\_L`b`7d]Whk`]hhYf"Wc`a`#\_ , B`d`V`a`];`ha

;`Ug\_bchYb`f4 [ `Ug\_bchYbE)` "'5df]`'&\$&'

## 6H7!DfY]gUi`gV`]W\_

8]Y`6]hWc]b!DfY]gY`\_c`bgc`X]YfYb`g]W`gY]h`ZUgh`XfY]`K`c`W`Y`b`ž`a`]h  
gY`f`k`Yb][ `6Yk`Y[ i`b[ `gY]h`XYa`% , "A`Āfn"

@Ui`h`7c]b;`YW\_c`]gh`XYf`J`Yfa`Ø[ Ybgk`Yfh`Ub`X]YgYa`HU[ `i`a`%ž(`i  
Ui`Z`& , "\$- (`ni`a`NY]hdi`b\_h`XYg`J`YfZUggYbg`X]YgYg`5fh]\_Y`g  
[ YZU`Yb`"8]Y`i`bhYfghØhni`b[ ``]Y[ h`VY]`&+"\$\$\$`ž`k`c`g]Y`Ua`& , "  
A`Āfn`[ YZU`Yb`]ghž`i`bX`XYf`Āb[ YfZf]gh][`Y`K`]XYfghUbX``]Y[ h`VY]

' \$\$\$\$' ž'Y]b 'DfY]gž'XYf'gY]h'5bZUb[ 'ž' b]'b]W h'a Y\ f'VYgi W h  
k i fXY"

...

8YhU]`g

6Ygi W Yb 'G]Y 'i b g'Ui Z. ' \_fmdhc!bYk g"Uh