



## ARTS3292

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9a U]: [\U`4 i bgk "YXi "Ui](#)

7 ci fgY'8YHJ]`g

7 fYX]hDc]bhtg`\*`

Gi a a UfmicZ\hY'7 ci fgY

Gi VYWh5fYU.: [efack

5hU`hja Y`k\Yb`a i W\`cZ\hY`k cfXfj`dcdi`U`hcb`]g`cb`hY`a cj Yz`]a a ][ fU`hcb`UbX`Ugmi`a` \Uj`Y`VYW`a`Y`  
k`c`c`Z\hY`a`cghW`b`h`b`h`ci`g`]ggj`Yg`h`c`X`Um`5`b`X`k` \]Y`5i`g`f`U`]U`fj`dcdi`U`hcb`]g`cb`Y`c`Z\hY`a`cghX`j`YfgYz`ci`f`  
gcW`Y`hm]g`\]g`h`f`W`j`m`c`b`Y`c`Z\hY`a`cgh]bgi`Uf`"b`h`]g`W`i`fgY`mci`k`j`"Yi`d`c`f`Y`\`ck`a` ][ fU`hcb`\`Ug`g`Ud`YX`  
UbX`f`Ubg`Z`fa`YX`5i`g`f`U`]U`b`dc`]h`W`j`UbX`gc`W`Y`mz`UbX`\`ck`5i`g`f`U`]U`\`Ug`f`Yg`d`cb`XYX`h`c`a` ][ fU`b`h`j`UbX`  
f`Yz` [ Y`Yg`"K`Y`Yi`Ua`]b`Y`h`Y`f`g`Y`UbX`Z`"c`Z\hY`K` \]h`5i`g`f`U`]U`dc`]W`z`h`Y`a`U`c`f`g`\]h`g`c`Z\hY`dc`g`h`k`Uf`  
d`Y`f`c`X`UbX`b`Yk`]b`h`f`b`U`h`c`b`U`c`V`][ U`h`c`bg`z`5i`g`f`U`]U`fj`W`Ub`[ ]b`[ U`h`h`i`X`Yg`h`c`b`Yk`W`a`Yfgz`h`Y`Udd`Y`U`f`U`b`W`c`Z`  
"V`c`U`h`d`Y`c`d`Y`"UbX`b`Yk`f`Y`[ ]a`Yg`c`Z`Yi`W`i`g`c`b`z`UbX`h`Y`k`Umg`]b`k`\]W`gi`W`W`ggj`Y`a` ][ fU`b`h`[ f`ci`d`g`\`Uj`Y`  
W`a`Y`h`c`W`j`5i`g`f`U`]U`\`ca`Y`"

7 ci fgY`@YUfb]b[ `Ci hW`a Yg

- %`5`b`U`m`g`Y`\_`Y`m`Y`Y`b`h`g`z`]X`Y`U`g`z`d`Y`c`d`Y`U`b`X`X`Y`j`Y`c`d`a`Y`b`h`g`]b`f`Y`U`h`c`b`h`c`5i`g`f`U`]U`fj`\]g`h`c`f`m`ic`Z`a` ][ fU`b`h`g`  
U`b`X`f`Yz` [ Y`Y`g`
- &`9`j`U`i`U`h`f`Y`Y`j`U`b`h`g`W`c`U`f`m`]h`f`U`h`f`Y`
- `5`b`g`k`Y`f`\]g`h`c`f`W`j`e`i`Y`g`h`c`b`g`i`g`]b`[ `Y`j`]X`Y`b`W`V`U`g`Y`X`U`f`[ i`a`Y`b`h`g`V`U`g`Y`X`c`b`]b`X`Y`d`Y`b`X`Y`b`h`m`c`W`U`h`X`  
g`c`i`f`W`g`
- (`7`c`b`h`]V`i`h`Y`Z`Y`W`j`Y`m`U`g`U`a`Y`a`V`Y`f`c`Z`U`[ f`c`i`d`c`f`h`U`a`
- )`7`c`a`a`i`b`]W`U`h`Y`]X`Y`U`g`U`b`X`Y`b`[ U`[ Y`]b`X`]g`W`g`g`c`b`

HYUW\]b[ `G`h`f`U`h`[ ]Yg`

5g`g`W`c`U`f`g`U`b`X`k`f`]h`Y`f`g`]b`h`ja`U`h`Y`m`]b`j`c`j`Y`X`]b`a` ][ fU`h`c`b`\]g`h`c`f`m`z`k`Y`X`Y`g`][ b`Y`X`h`]g`W`i`fg`Y`k`]h`h`Y`U`a`c`Z`  
g`\`ck`W`U`g`]b`[ `h`Y`V`Y`b`Y`Z`h`g`c`Z`f`Y`g`Y`U`f`W`!`Y`X`h`Y`U`W`X`]b`[ "K`Y`V`Y`]Y`j`Y`h`U`h`f`Y`g`Y`U`f`W`!`Y`X`h`Y`U`W`X`]b`[ `W`c`b`j`Y`m`g`  
Y`b`h`i`g`]U`ga`U`b`X`X`Y`X`]W`U`h`c`b`h`c`U`g`d`Y`W`Z`]W`h`Y`U`W`X`]b`[ `U`f`Y`U`z`U`b`X`h`c`\]g`h`c`f`W`j`g`W`c`U`f`g`\]d`"M`c`i`k`j`"V`Y`  
Y`b`W`i`f`U`[ Y`X`h`c`h`]b`\_`U`V`c`i`h`\`ck`a` ][ fU`h`c`b`\]g`h`c`f`m`\`U`g`]b`Z`c`fa`Y`X`W`f`Y`b`h`Y`j`Y`b`h`g`z`dc`]W`Y`g`U`b`X`U`h`h`i`X`Y`g`  
h`c`k`U`f`X`g`a` ][ fU`b`h`g`]U`b`X`f`Yz` [ Y`Y`g`]b`5i`g`f`U`]U`"M`c`i`k`j`"V`Y`]b`h`c`X`i`W`X`h`c`f`]W`X`U`b`X`X`]j`Y`f`g`Y`a`U`h`f`]U`z`Z`f`c`a`  
Z`]a`g`U`b`X`]h`Y`f`U`h`f`Y`h`c`a`c`f`Y`h`f`U`X`]h`c`b`U`U`f`W`X`]j`U`g`c`i`f`W`g`z`U`b`X`k`j`"V`Y`d`U`f`h`c`Z`k`\`U`h`]g`U`k`U`m`g`U`]j`Y`m`Y`U`f`b`]b`[  
Y`b`j`]f`c`b`a`Y`b`h`5`g`k`Y`"U`g`X`Y`j`Y`c`d`]b`[ `m`c`i`f`k`f`]h`Y`b`U`b`X`U`b`U`m`]W`j`g`\_]g`z`m`c`i`k`j`"U`g`c`V`Y`[ ]j`Y`b`h`Y`g`d`U`W`  
U`b`X`[ i`]X`U`b`W`h`c`X`Y`j`Y`c`d`U`d`f`c`Y`W`h`c`j`Y`f`h`Y`W`i`fg`Y`c`Z\hY`g`Y`a`Y`g`h`f`]b`U`g`a`U`" [ f`c`i`d`U`V`c`i`h`U`a` ][ fU`b`h`  
[ f`c`i`d`c`Z`m`c`i`f`c`k`b`W`c`c`g`]b`[ "

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Hi hc]U`dUdYfg`UbX`fYgYUfW`YggUmg`g\ci`X`VY`gi Va ]hYX`Y`YWfcb]WU`mhc`Hi fb`#i`b`cb`A ccX`Y`"H\Y`"j]b\_`k`j`VY`WYUf`mia`Uf`\_YX"

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5`k`f]hY`b`k`cf`\_`a`i`ghVY`cf][`]bU`f]Y`"bchd`U[`]Uf]gYX`U`bX`dfcdYf`m`fYZYfYbW`X`i`g]b[`]`C`B`9`fYW`[`b]gYX`fYZYfYbW]b[`]`gmg]hYa`fY["`"C`I`Z`c`f`X`c`f`<`Uf]`UfX`U`Vi`hbchU`W`ca`V]bU]h]cb`c`Z`gmg]hYa`g`"H\Y`d`fYZYfYbW`"j]g`Z`c`f`Z`c`b`c`h`g`m`g`h`Y`a`-`C`I`Z`c`f`X`c`f`7`\\W]`c`"

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#!hY`l`h`fY[`"G`h`Y`U`f`b`g`&`\$`%`ž`d`"``%`(`Ł`]g`c`\_`U`m`d`f`c`j`]X`Y`X`]`h`]b`W`i`X`Y`g`U`d`U[`Y`b`i`a`V`Y`f`5`B`8`U`f`Y`Z`Y`f`Y`b`W`"``]g`h`

GYY.`\hhdg.#gh`XYbh`i`bgk`"YXi`"Ui`#Uf]`UfX`!`fYZYfYbW]b[

H]d.`K`\\Yb`]b`Xci`Vh`ž`fYZYfYbW`":`c`c`b`c`h`Y`g`ž`Z`c`f`Y`I`Ua`d`Y`ž`U`f`Y`b`c`h`c`b`m`Z`c`f`X`]fYW`h`e`i`c`h`U]`c`b`g`V`i`h`U`g`c`Z`c`f`

]b`g`h`U`b`W`g`]b`k`\\W`m`c`i`d`U`f`U`d`\\f`U`g`Y`h`Y`k`c`f`\_`c`Z`c`h`Y`f`g`W`c`U`f`g`"

H]d.`:`c`c`b`c`h`Y`g`[`c`]b`g`Y`e`i`Y`b`W`ž`V`i`h`g`\\c`i`X`b`Y`j`Y`f`V`Y`d`U`W`X`b`Y`I`h`i`c`Y`U`W`X`c`h`Y`f`"O`O`O`-`Z`m`c`i`k`U`b`h`i`c`f`Y`Z`f`

h`c`h`c`g`c`i`f`W`g`U`h`c`b`Y`d`c]b`ž`]b`g`Y`h`c`b`Y`Z`c`b`c`h`Y`U`b`X`h`Y`b`X`Y`g`W`]V`Y`V`c`h`g`c`i`f`W`g`"O`O`

H]d.`K`]h`U`Z`c`b`c`h`Y`ž`Z]f`g`h`h`Y`b`g`i`f`b`U`a`Y`"``#`U`V]`c[`fUd`m`#fYZYfYbW`"``]g`ž`U`f`f`U`b[`Y`]b`U`d`\\U`V`Y`h]W]`c`f`X`Y`f`V`m`g`i`f`b`U`a`Y`"

:`c`f`a`U`h]`b[

5`k`f]hY`b`k`cf`\_`a`i`ghVY`dfcdYf`m`Z`c`f`a`U`hY`X`.

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%&`d`c]b`h`Z`c`b`h`f`d`fYZYfU`V`m`U`b`Y`U`g`m`h`c`fYUX`Z`c`b`h`g`i`W`U`g`H]a`Y`g`B`Y`k`f`c`a`U`b`Ł`

F`Y`U`g`c`b`U`V`Y`a`U`f[`]b`g`"

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O`Q`D`Y`h`f`B`"G`h`Y`U`f`b`g`ž`9`W`V`W`d[`I`adV`:`[e`f`a`c`k`ž`f`X`Y`X`b`"B`Y`k`m`c`f`\_`f`c`i`h`Y`X`[`Y`ž`&`\$`%`ž`d`"``%`

O`Q`O`#`W`Ł`f`Y`W`i`G`Y`Y`Z`c`b`c`h`Y`"``"

O`Q`D`Y`h`f`B`"G`h`Y`U`f`b`g`ž`9`W`V`W`d[`I`adV`:`[e`f`a`c`k`ž`f`X`Y`X`b`"B`Y`k`m`c`f`\_`f`c`i`h`Y`X`[`Y`ž`&`\$`%`ž`d`"``%`/`>`c`U`b`k`"G`W`Ł`h`ž`';`Y`b`X`Y`f`5`I`g`Y`Z`7`U`h`Y`[`c`f`m`i`c`Z`<`]g`h`c`f]W]`5`b`U`m`g]g`ž`3`\_`W`d[US`:`[e`f`a`d[US`^`D`W`h[W`ž`-`%`ž`%-`\*`ž`d`d`"

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A U`cf`fYgYUfW`YggUm	) \$i	&* #\$( #&\$%- '\$(. \$\$`DA	%ž&ž
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GHUfhXUH`. Bch5dd`WVY`

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8YHU]`g. `Hi hcf]U`dUdYf`"%) \$\$`k cfXg`"5`k f]hYb`fYgdcBgY`h`U`gYhi hcf]U`ei Ygh]cb`W`cgYb`Z`ca`h`Y`Z`fghi`  
k YY\_g`cZ`h`Y`W`ci`fgY`Z`UbU`mg]b[ `gYh`fYUX]b[ g`H\`g`fYW`]j`Yg`k`f]hYb`Z`YXVUW`cb`h`Y`h`i`fb]h]b`dU[ Y`cZ`h`Y`f`  
gi`Va`]gg]cb`ž`i`bXY`f`h`Y`W`ca`a`Ybh]g`Z`Y`X`ž`c`Z`cbY`h`h`fY`dUfU[ fUd`g`ž`VUgYX`cb`h`Y`f`]b`W`f`dc`fU]h]cb`c`Z`  
gci`fW`g`ž`h`Y`f`UV`]m]h`c`U`W`W`fU]h`m`UbU`mgY`h`Y`gci`fW`a`U]h`f]U`UbX`fYgdcBx`h`h`Y`ei`Ygh]cb`ž`h`Y`f`k`f]hYb`  
ghmY`UbX`d`fYgYbhU]cb`"

5XX]h]cbU`XYHU]`g.

H\`g`h`h`cf]U`dUdYf`]g`U`a`]b`YggUm]bgcZUf`Ug`mci`VUgY`mci`f`Ub`gk`Yf`cb`gi`Z]W]Ybh`fYgYUfW`f`gY`W`cbXUfm`#`  
df]a`Ufn`U`bX`d`fYgYbh]h]b`YggUmZ`ca`Uhf]b]h`c`Xi`W]h]cb`ž`\_Y`m]dc]b]h]g`Yi`Ua`]b`YX`]b`g`m]h]a`U]h]WZ]g`]cb`ž`  
W`cb`W`g]cb`L`" `h]g`VUgYX`cb`ei`Ygh]cbg`gYh`Z`f`K`YY\_g`%d`(" `Mci`d]W`cbY`cZ`h`YgY`ei`Ygh]cbg`UbX`Ub`gk`Yf`]h`  
i`g]b[ `W`ci`fgY`a`U]h`f]U`g`" `h]g`Xi`Y`Uh`h`Y`YbX`c`ZK`YY\_`( `ž`b`ch`k`YY\_)`ž]b`\_YYd]b[ `k`]h`h`Y`bYk`h`Y`fa`Z`ca`U]h`

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fYdcf]g`"

5ggYgga Ybh&`A U`cf`fYgYUfW`YggUm

GHUfhXUH`. Bch5dd`WVY`

@Yb[ h. `&) \$\$!` \$\$\$`k cfXg`

8YHU]`g. `F`YDA`

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H\]g]g`h\Y`Z]bU`UggYgga YbhZcf`UHYbXUbW`di fdcgYg`H\YfY`k`j`VY`h]a Y`XYX]WJHX`]b`WUgg`hc`YggUm  
k`f]h]b[ `UbX`fYgci`fW`g`U`c`WJHX`cb`A`ccX`Y`

5ggYgga YbhfYj`]g]cb`hc`VY`]bfcXi`W`X`]b`HYfa` `&\$%`!`%\$` `cZ`h\Y`cj`YfU`a`Uf`\_`Zcf`h]g`UggYgga Ybhk`j`  
W`bg]ghcZU`df]a`Ufmigci`fW`fUg`\_`hc`VY`dfYgYbH`X`]b`h\Y`gYa`]bUf`A`cfY`XYHJ]g`k`j`VY`Uj`U]UV`Y`cb`A`ccX`Y`  
!`h\Y`VUg]W]XYU`]g`hc`Z]bX`U`df]a`Ufmigci`fW`fY`Yj`Ubh`hc`mci`f`YggUmUbX`hc`g`UfY`XYHJ]g`cZ]hk`]h`mci`f`  
WUgga`UH`g`NcfU`k`j`dfcj`XY`k`f]h]b`ZYXVUW`\_`j]U`Ya`U]`UbX`h\Y`a`Uf`\_`k`j`[`c`hc`k`UfXg`mci`f`cj`YfU`YggUm`  
a`Uf`\_`

Hi`fb]h]b`gYH]b[`. `H\]g`Ugg][`ba`Ybh]g`gi`Va`]h]X`h`fci`[`\`Hi`fb]h]b`UbX`ghi`XYbhg`WJb`gY`Y`Hi`fb]h]b`g]a`]Uf]hm`  
fYdcf]g`

5ggYgga Ybh' . ; fci d`DfYgYbH]h]cb

GHUfhXUH` . Bch5dd`]WJY`

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8YHJ]g.`;` fci`d`dfYgYbH]h]cb`cZ` \$`a`]bi`hYg`d`i`g`U` )` \$`\$`k`cfX`fYgdcbgY`"9Ufm]b`h\Y`W`ci`fgY`Z`mci`k`j`VY`  
di`h]b`hc`U`ga`U`[`fci`d`"Mci`f`[`fci`d`k`j`V`W`ccgY`U`a`][`fUbhW`ca`a`i`b]m]hc`h]g`hc`f]W]gY`"H\`fci`[`\`ci`h`h\Y`  
gYa`Ygh`f`z`h\Y`[`fci`d`k`j`V`XYj`Y`cd`h\Y`f`dfc`Y`W`h]b`WUgg`UbX`ci`hg]XY`cZ]h]f]Y`"C`j`Yf`Ya`U]`UbX`#`cf`h`fci`[`\`  
YI`h`fbU`a`YY]h]b[`g]c`"H\Y`U]a`]g`hc`dfYgYbH`U`&`!"`\$`a`]bi`h`dfYgYbH]h]cb`]b`K`YY`\_`%`&`cf`%` `cb`h\Y`dUghUbX`  
dfYgYbhcZ`h\Y`XYg][`bUH`X`a`][`fUbhW`ca`a`i`b]m]"5g`d`UfhcZ`h\Y`UggYgga Ybh`z`gh`XYbhg`k`j`VY`f`Yei`]fYX`hc`  
\`UbX`]b`U`)"`\$`\$`k`cfX`XYgW]d]h]cb`cZ`h\Y`f]bX]j`]Xi`U`fYgYUfW`UbX`[`fci`d`YI`dYf]YbW`"H\Y`ZYXVUW`\_`dfc`W`gg`  
]g`U`cbY`dU`[`Y`fYgdcbgY`Z`fca`a`Y`UggYgg]b[`h\Y]f`[`fci`d`dfYgYbH]h]cb`]b`W`cb`↑`bW]cb`k`]h`h\Y`)"`\$`\$`k`cfX`  
fYZYW]cb`"≡UggYgg`cb`h\Y`VUg]g`cZei`U`]micZ`h\Y`dfYgYbH]h]cb`z`h\Y`i`gY`cZ`h]g`hc`f]WJ`XUH`UbX`]a`U`[`Yfn`z`h\Y`  
Uf`[`i`a`YbhUbX`UbU`mg]g`z`ck`k`Y`h\Y`[`fci`d`dYf`z`fa`YX`Ug`U`h`Ua`z`UbX`fYgdcbg]j`YbYgg`hc`ei`Ygh]cbg`Z`ca`  
h\Y`WUgg`"

5XX]h]cbU`XYHJ]g.

K`Y`k`j`V`U`c`WJHY`d`YbmicZ]h]a`Y`]b`WUgg`Zcf`[`fci`d`k`cf`\_`]b`Ubh]W]dU]h]cb`cZ`h\Y`Z]bU`dfYgYbH]h]cbg`"H\YfY`k`j`  
VY`U`gi`Va`]gg]cb`Vcl`cb`A`ccX`Y`Zcf`h\Y`k`f]h]b`dUfhcZ`h\Y`UggYgga Ybh`z`hc`VY`gi`Va`]h]X`h\Y`XUmicZ`h\Y`  
dfYgYbH]h]cb`"

Gi`Va`]gg]cb`bchYg.H\Y`dfYgYbH]h]cbg`UfY`]b`K`YY`\_`-`fbch`%`&`cf`%` Ł

Hi`fb]h]b`gYH]b[`. `H\]g`]g`bchU`Hi`fb]h]b`Ugg][`ba`Ybh`

5 HbXUbW F Yei JfYa Ybhg

5 HbXUbW cZ YW fYg UbX hi hcfJ U g UfY a UbXU hcfm] b h] g W i fgY " i bYI W gYX UVgYbW Zca a cfY hUb &\$i cZ YW fYg UbX hi hcfJ U g k ] fYgi h] b h Y Uk UfX cZ U ZJ ] fUXY"

h YW fYg UbX hi hcfJ U g mci k ] U W j Y mYb [ U [ Y k ] h W fY W i fgY W b h Y b h z Y b U V ] b [ mci h U h U ] b 7 @ C %"

7 ci fgY GWX YXi Y

[J Jk WUgg ha YhUVY](#)

Hja YhUV Y

8 UH	HmdY	7 cbhYbh
K YY_ % % : YVfi Ufm! & ( : YVfi Ufm	@YWi fY	% i hfcXi W]cb &" 8 YW c b] g] b [ a ] [ fU hcb \ ] g hcfm a ] [ fU hcb z g Y h Y f W c b] U ] ga UbX h X] [ Y bci g gcj Y fY ] [ b m
	GYa ] bUf	% A Y Y h U b X ; f Y Y h &" 8 Y W c b] g] b [ a ] [ f U h c b \ ] g h c f m
K YY_ & & ) : YVfi Ufm! " A UfW	@YWi fY	A ] [ f U b h g z f Y Z [ Y Y g UbX K \ ] h Y 5 i g h f U ] U V Y Z c f Y K c f X K U f =
	GYa ] bUf	A ] [ f U b h g z f Y Z [ Y Y g UbX K \ ] h Y 5 i g h f U ] U V Y Z c f Y K c f X K U f = ; fci d k cf_ VY [ ] bg
K YY_ " . ( A UfW ! % \$ A UfW	@YWi fY	% Dcghk Uf a ] [ fU hcb &" 8 ] gd U W X D Y f g c b g
	GYa ] bUf	f B Y k 5 i g h f U ] U b g f i 5ggYgga Ybh [ i ] XUbW . h hcfJ U d U d Y f
K YY_ ( . % % A UfW ! % + A UfW	@YWi fY	% 6 f] h] g a ] [ fU b h g &" 7 \ ] X a ] [ fU hcb
	GYa ] bUf	f k \ ] b [ ] b [ Dca g f B ; fci d k cf_
	5ggYgga Ybh	Hi hcfJ U d U d Y f X i Y f % \$ \$ \$ k c f X g L V m ( da : f ] X U m A U f W % * ! d Y U g Y g i Va ] h h c H i f b h i h # A c c X Y
K YY_ ) . % A UfW ! & ( A UfW	@YWi fY	A Y b z K ca Y b UbX 7 \ ] X f Y b . h h a U h < ] g h c f ] Y g c Z Dcghk Uf a ] [ fU hcb
	GYa ] bUf	A ] [ f U b h Z J a ] ] Y g ; fci d k cf_ "
K YY_ * . & ) A UfW ! " % A UfW	@YWi fY	f b c U h D Y c d Y f i U b X h Y Y b X c Z K \ ] h Y 5 i g h f U ] U
	GYa ] bUf	f b c U h D Y c d Y f i U b X h Y Y b X c Z K \ ] h Y 5 i g h f U ] U

		Dfja Ufmgci fW`dfYgYbHjcbg
K YY_+. '%5df]'!'+5df]'	@YWh fY	: fca `5gg]a ]Uhjcb`hc`A i `hW`hi fU`]ga ""Ubx`VUW` U[ U]b3`A ][ fUjcb`UbX`gYhYa Ybhd`]M]Yg`UbX XYVUhYg`Zfca `%- +, `hc`hY`dfYgYbh
	GYa ]bUf	B Y][ \ci fVccXg`cf; \Yhcg3.`a a ][ fUjcb`]b`hY`YfU cZa i `hW`hi fU`]ga  Dfja Ufmgci fW`dfYgYbHjcbg
K YY_., ; '5df]'!%( '5df]'	@YWh fY	6Yz`fY`UbX`UZYf`HUa`dU.`Zfca`a`UbXUhc`fmhc`cZ g\cfY`XYh`bhjcb
	GYa ]bUf	F YZ [ Y Y`]] Yg  ; fci d`k`cf_
K YY_-';% '5df]'!`&% 5df]'	@YWh fY	K fUd`i`d`YWh fY
	GYa ]bUf	: fci d`DfYgYbHjcbg
	5ggYgga Ybh	) \$\$`k`cfX`k`f]hYb`gi`Va`]gg]cb`k`]h`[ fci d` dfYgYbHjcb`hc`VY`gi`Va`]hYX`hc`Hi`fb`h`Ubmi]a`Y cb`hY`XUmcZ`hY`[ fci d`dfYgYbHjcbg"
K YY_`%\$.`&&'5df]'!`&, 5df]'	F YUX]b[	H\YfY`]g`bc`ZJW`hc`ZJW`WUgg`]b`K`YY_`%\$`Xi`Y`hc 9UghYf`A`cbXUmUbX`5bnUW8`Um`
	5ggYgga Ybh	Mci`f`fYgYUfW`YggUm!`hY`Z]bU`UggYgga`Ybh!`]g`Xi`Y Vm(`da`:`f]XUm`&`h`5df]'!`d`YUgY`gi`Va`]h`hc`Hi`fb`h` h`



# F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

@Y[ Ubhc`i]g`mci f`cbY`ghcd`g\cd`Zcf`Wci fgY`fYgci Wg`fa`cghmL`

## F YWca a YbXYX`F Ygci fWg

H\YfY`jg`bc`gYhHl hZcf`h]g`Wci fgY`"A ccXY`#@Y[ Ubhc`WcbHJ]bg`U`"hY`YggYbh]U`"UbX`Yi fFU`fYUX]b[ g`Zcf`YUWX`k`YY`\_"6Y`ck`UFY`gca`Y`fYWca`a`YbXYX`[ YbYFU`"hY`hgZ`ci`fbU`g`UbX`k`YVg]hYg`"

HYL hg` - B6. `H\YgY`UFY` ; 9B9F5@]bhcXi`WcfmHl hg` - H\YfY`UFY`a`Ubmia`cfY`fYgci`fWg`]b`hY`@]VfUfm`H\Y`fYUX]b[ `]g]hg`Zcf`YUWX`k`YY`\_g`hi`hcf]U`c`ZYf`Z`fH`Yf`[ i`]XUbW`"

>cW`7c`"bgZ?` [Yd`f` S` Ve` [ `6 [efS` f`>S` Ve,` 3gefD`[S` e`baefZ` Sd;`\_`\_` [YdSf]a` f`fGmXbYm`D`i`h`DfYggZ`%` ,` ,` L`

5bb!A`Uf]>cfXYbgZ`3`[W` fa`5`[f]`W` ,` eWf`[` Y`\_` [Yd` fe` [ `3gefD`[S]`#`+`&` Z`)'`Z`fGH`@YcbUfXg.`5`"Yb`UbX`I`bk`]bZ`%` -`+L`

>Ua`Yg`>i`dd`fYX`"LZ`FZW3gefD`[S` `BWab`W`S` `W`UkU`abW[S`aXfZW`Sf]a` f`[fe`bWab`WS` `V`fZW]dadY`[`eZ`f7`Ua`Vf]X[`Y`I` b]`Yfg]mDfYggZ`&\$\$&L`-`A`m7`ci`fgY`"

>Ua`Yg`>i`dd`Z`8da`\_`I`Z`[fW3gefD`[S`fa`I`aa`\_`WdS` ,`FZWE`fack`aX3gefD`[S` `;`\_`\_` [YdSf]a` f`fA`Y`Vci`fbY.`7`Ua`Vf]X[`Y`I` b]`Yfg]mDfYggZ`&\$\$&L`-`C`b`]bY`UWV`gg`j`]U`@]VfUfm`W]H`c`[ i`Y`"

>c`b`@UW`UbX`>UW`ei`Y`]bY`HYa`d`Y`hcb`fYXg`"LZ`4a`V`7j`bWd`\_`W`f` ,`3`6a`Ug`\_`W`fSk` :` [efack`aX3gefD`[S` ;`\_`\_` [YdSf]a` e`[`UW`#`+`&` Z`fA`Y`Vci`fbY.`C`I`ZcfXZ`%` -` )`L`-`A`m7`ci`fgY`"

?`U`i`g`BYi`a`UbbZ`3`Udaee`fZWE`WSe` ,`3gefD`[S`e`D`Weba`eWfa`D`WgYWWeZ`3` :` [efackZ`6`UW`\_`W`VZA`Y`Vci`fbYZ`&\$%)`"

9f]WF`]WX`UfXgZ`6`Wef` Sf]a` `3gefD`[S` ,`?` [YdSf]a` fa`3gefD`[S`e`[`UW`#`+`" `#`f`GmXbYm`I`BGK`DfYggZ`&\$\$` ,`L`-`A`m7`ci`fgY`"

;`Yc`ZYmG`Yf]b[`hcbZ`3gefD`[S`e`[\_`\_` [Yd` fe`#)`\*\*`Z`#`+`\*\*`f`GmXbYm`5`"Yb`UbX`I`bk`]bZ`&`"YX]hcbZ`%` -` \$L`

## >ci`fbU`g`

3gefD`[S` :` [efad]US`^E`fgV]W`e`

<agd`S`^a`X3gefD`[S` `E`fgV]W`e`

<agd`S`^a`XD`WgY`WWE`fgV]W`e`

;`fWd`Sf]a`S`^?` [YdSf]a` `D`Wh]W`

BWab`WS` `V`B`SUW`

>STagd: [efack`

3gef0S`S` <agd S^aX: [efack S` V Ba`f[Ue

7fz` [U E fgV[Wé

<agd S^aX7fz` [U S` V ? [YdSf[a` E fgV[Wé

<agd S^aX;\_ \_ [YdS` fS` V DWgYWWVE fgV[Wé

K YVg]hYg/`8UHUVUgYg

[\hdg.##fcj Y"b`U"\[cj "Ui`!`cbY`cZhY`VYghXUHUVUgYg`cb`hY`\]bhYfbYhZ`YI W`YbhiZcf`5i ghfU`\]Ub`WébhYbh-  
YUgmhc`bUj \] \[UH`"](#)

[\hd.##k k k"ja a \] \[cj "Ui #!`8YdUfha YbhcZ-a a \] \[ fUhc b`UbX`7 \]hYbg\`d`5i ghfU`\]Už`\]bWi XYg`WébhYa dcfUfm  
UbX`\\]ghcf\]WJ`gci fW`g"](#)

BGK`A ] [ fUhc b`<Yf]hU[ Y`A i gYi a`fC`b`]bYŁ` [\hd.##k k k"a \] \[ fUhc b`Yf\]hU\[ Y"bgk "\[cj "Ui #/Y`cb\[ \]b\[ g!  
\\_ca Y#JVci hVY`cb\[ \]b\[ g#U ghfU`\]Ug!a \] \[ fUhc b!`\]ghcfm#](#)

G6G`-a a ] [ fUhc b`BUhc b`H/ [cj "Ui #/Y`cb[ ]b[ g!

Gi Va ]gg]cb`cZ5ggYgga YbhHUg\_g

Gi Va ]gg]cb`cZ5ggYgga YbhHUg\_g

Hi fb]h]b`Gi Va ]gg]cb

≠mci`YbWci bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]h]b`z`d`YUgY`  
H`Y`d`cb`Y`9I`H`fb`U`Gi`ddcfh`cb`-`,`)`'`'`'`%`cf`Ya`U]`h`Ya`cb`YI`H`fb`U`H`hgi`ddcfh`4`i`bgk`"YXi`"Ui`"Gi`ddcfh`  
`ci`fg`UfY`,`.\$\$Ua`-`%\$.\$\$da`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`cb`k`YY`YbXg`f`l`\*)`XUmg`U`m`Y`Uf`l`"≠mci`  
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]h]b`mci`a`Um`Udd`m`z`f`Ub`YI`H`bg]cb`z`Vi`hmc`i`  
a`i`gh`f`Y`h]b`mci`f`h]W`Y`h`bi`a`VY`f`Z`ca`9I`H`fb`U`Gi`ddcfh`f`U`cb[`k`]h`Ub`m`c`h`Y`f`f`Y`j`Ub`h`X`c`W`a`Y`b`h`g`l`hc`  
]b`Wi`XY`Ug`Y`j`]X`Y`b`W`hc`gi`ddcfh`mci`f`YI`H`bg]cb`Udd`]W`h]cb`"≠mci`Ya`U]`9I`H`fb`U`Gi`ddcfh`mci`k`]"`

## 5 WUXYa ]W<c bYghmUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga `]g`i g]b[ `hY`k cfXg`cf]XYUg`cZchYfg`UbX`dfYgYbh]b[ `hYa `Ug`mci f`ck b" `hWUb`hU`Y`a Ubm  
Zcfa gž`Zca `XY`]VYfUHY`WXYU]b[ `hc`UWV]XYbhU`mW`dm]b[ `Zca `U`gci fW`k ]h`ci hUW\_bck`YX[ Ya Ybh`

I BGK `[ fci dg`d`U[ ]Uf]ga `]bhc`hY`Zc`ck ]b[ `WUHY`[ cf]Yg.

7 cdm]b[ .`i g]b[ `hY`gUa Y`cf`j Yfmg]a ]Uf`k cfXg`hc`hY`cf][ ]bU`hYI hcf]XYU`k ]h`ci hUW\_bck`YX[ ]b[ `hY`  
gci fW`cf`i g]b[ `ei chU]cb`a Uf\_g" `H\]g`U`gc`Udd`]Yg`hc`]a U[ YgžUfhUbX`XYg][ b`dfc`YWgžUg`k Y`Ug  
dfYgYbhU]cbg`k \YfY`gca YcbY`dfYgYbh]g`UbchYf`g`]XYUg`cf`k cfXg`k ]h`ci hWYX]h`

hUddfcdf]UHY`dUfUd`fUg]b[ .`7`Ub[ ]b[ `U`ZYk`k cfXg`UbX`d`fUgYg`k`Y`a cghmifYU]b]b[ `hY`cf][ ]bU`  
ghfi W`fY`UbX`#`f`dfc[ fYgg]cb`cZ]XYUg`cZ`hY`cf][ ]bU`ž`UbX`]bZcfa U]cb`k ]h`ci hUW\_bck`YX[ Ya Ybh`H\]g`U`gc  
Udd`]Yg`]b`dfYgYbhU]cbg`k \YfY`gca YcbY`dUfUd`fUgYg`UbchYf`g`]XYUg`cf`k cfXg`k ]h`ci hWYX]hU`bX`hc  
d]YW]b[ `hc[ YhYf`ei chYg`UbX`dUfUd`fUgYg`]bhc`U`bYk`k \c`Yž`k ]h`ci hUddfcdf]UHY`fYZYfYbW]b[ "

7 c`i g]cb.`k cf\_]b[ `k ]h`chYfg`Vi hdUgg]b[ `cZ`hY`k cf\_]Ug`U`dYfgcb`g`]bX]j ]Xi U`k cf\_]7 c`i g]cb`U`gc  
]bWi XYg`dfcj ]X]b[ `mci f`k cf\_]hc`UbchYf`gh`XYbhVYZc`fY`hY`Xi Y`XUHYž`cf`Zc`f`hY`di fdcgY`cZ`hY`a

- i bXYfghUbx'mci f'f][ \hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[ ]Uf]ga ž'Wcdmf][ \hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5Ww'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj ]ci f'YI dYW'X'cZYj Yfmcby'j]b'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj ]Wg'UbX'j]bZcfa Uh]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh'YgY'UfYUg'k ]`VY'ZJa ]]Uf'hc'mci ž'ch'Yfg'k ]`VY'byk "; U]b]b[ 'U'gc`X'i bXYfghUbx]b[ 'cZU`h'Y fY'UH'X'UgdYW'g'cZ9@G9'k ]`Y'd'mci 'a U\_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hd. #gj V'YWf i \]XYg" \]VfUfm'i bgk "YXi "Ui #` \]gY#JVci h' \]gY](#)

