



IEST5001

: fUa Yk cf_g'cZ9bj]fcba YbHJ`F Y`UHjcbg/`@YUXYfg\]d

HYfa `CbY`#`&\$&%

7ci fgY`Cj Yfj JYk

GHJZZ7cbHJW`8YHU]`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]UV]`]m	@cWU]cb	D\cbY
HYa U`A]ghY]b	hYa U"a]ghY]b4 i bgk "YXi "Ui	6mUddc]bha Ybh Xi f]b[`Wcbgi `tU]cb \ci fg fHi YgXUmž (. '\$d"a "!') . '\$ d"a "E" `b`dYfgcb`cf cb`]bY"	A cfj Yb`6fck b 6i]X]b[" A 6' *(

@YW`i fYfg

B Ua Y	9a U]	5j U]UV]`]m	@cWU]cb	D\cbY
>c\b`7Uff	ĉ\b"WUff4 i bgk "YXi "Ui	6mUddc]bha Ybh Xi f]b[`Wcbgi `tU]cb \ci fg fK YXbYgXUmž% d"a "!' &d"a "E" `b` dYfgcb`cf`cb`]bY"	A cfj Yb`6fck b 6i]X]b[" A 6' *'	

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@cWU]cb. GWXcc``C Z]WžA cfj Yb`6fck b`6i]X]b[ž@Yj Y`&ž&),

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D\cbY. ž*%&`- ' ,)`:%*, %

: U! . ž*%&`- ' ,)` ; , +\$)

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

7ci fgY'8YHJ`g

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Gi a a UfmicZ\hY'7ci fgY

H\]g`Wci fgY'dfcj]XYg'Ub`]bfcXi W]cb'hc'h\Y`Wca d'YI`'UbX'hfUbgX]gW]d`]bUfmbUhi fY`cZYbj]fcba YbhiUbX`gcW]Y]m]ggi Yg'UbX'h\Y`]b\YfYbhVYbY]Z]hg'UbX`WXU`Yb[Yg`]b'a i`h]X]gW]d`]bUfmiUddfcUWX`Yg`hc`Ybj]fcba YbhiU`YUXYfg\]d`H\Y`Ya d\Ug]g`]g`cb`YI d`c`f]b[`WcbW]dhi U`UbX`dfUW]W]`ZUa Yk cf_g`h\Uh]bZcfa`c`W]`UbX`[`cVU`UddfcUWX`Yg`hc`Ybj]fcba YbhiU`a`YUb]b[gZ`fY`Uh]cbgZ`XYW]g]cbgZ`UbX`UW]cbg`"5`_Ymia YggU[Y`]g`h\Uh`h\Y`ZUa Yk cf_g`Zc`fYbj]fcba YbhiU`YUXYfg\]d`UfY`bchgh]h]W]Wi h`Wcb]bi U`mYj`c`j`]b[Zk`]h`h\Y`dUW]`cZ`WX`Ub[Y`dUf]h]W`Uf`mfUd]X`Uhd`fYgYb]h`

7ci fgY`@YUfb]b[`Ci hWca Yg

- %` 8]gW`gg`h\Y`WX`Ub[]b[`ghU]h`cZ`h\Y`Ybj]fcba YbhiUbX`dYfgdYW]j Yg`cb`W`fYbh`_YmYbj]fcba YbhiU`]ggi Yg`Ug`]bZi`YbhiU`ZUW]c`fg`]b`ZUa Yk cf_g`[`c]`Yfb]b[`Ybj]fcba YbhiU`YUXYfg\]d`
- &"` 8Ya`cbghfU]h`Ub`i`bXYfgh]UbX]b[`cZd`UW]!VUgYX`UbX`]bhi`fbU]hc`bU`dYfgdYW]j Yg`fY`Yj`Ubhi`c`Ybj]fcba YbhiU`YUXYfg\]dZ`UbX`fY`Wc`[`b]gY`UbX`UbU`mgY`h\Y`fY`Yj`UbW]`cZgcW]U`gmg]hYa`g`cZdck`Yf`UbX`W`h`fU`gmg]hYa`g`cZ`bck`YX[`Y`
- '`" I`gY`W]h]W]`UbX`W]YU]h] Y`gmb`h\Yg]g`hc`f][`cfc]`g`mYj`U`i`U]h`Ybj]fcba YbhiU`]ggi Yg`UbX`Uf]h]W`U]h`Uddfcdf]U]h`fYZYI`]j`Y`YUXYfg\]d`dfUW]W]g`hc`UXX`fYgg`fYU`!k`cf`X`bYk`cf`Wca`d`YI`dfcV`Ya`g`
- ("` 7ca`a`i`b]W]h]W]`Wca`d`YI`]XYUg`]b`U`j`Uf]Y]hmcZ`Zcfa`Uhg`hc`X]j`YfgY`Ui`X]YbW]gZ`UbX`XYa`cbghfU]h`Ub`i`bXYfgh]UbX]b[`cZfYZYI`]j`Y`UbX`fYgdc]bg]Y`Y`dfUW]W]g`cZ`Wc`U`VcfU]h] Y`f`ghYbj]fcba YbhiUbX`gcW]Y]m`YUXYfg\]d`
-)" `XYb]h]ZmVUff]Yfg`hc`UbX`cddc`f]i`b]h]Yg`Zc`f`gi`ghU]bUV]`]m]UbX`fYg`hc`fU]h] Y`fY`Uh]cbg`fY`U]h]X`hc`U`VfcUX`fUb[Y`cZgcW]U`Z`W`h`fU`Z`Yh`]W]Z`dc`]h]W]Z`UbX`Y`Wcbca`]WZUW]c`fg`

HYUWX]b[`GhfU]h[]Yg`

H\]g`Wci fgY`U]a`g`dfcj]XYg`Ub`UffUmicZ`ZUa Yk cf_g`h\UhgdYW]Zm`_Ym`YbgYg`h\fc] [`k` \]W]`hc`j`]Yk`Ybj]fcba YbhiUbX`gcW]Y]m]dfcV`Ya`g`UbX`dchYbhU`]h]YgZ`dfcj]X]b[`mci`k`]h`U`WcbW]dhi U`hc`c`_]h]Zc`f`mci`f`Z`h`i`fYg`gh`X]Yg`]b`h\Y`dfc[fUa`UbX`]b`mci`f`Z`h`i`fY`k`cf`_`Hc`UWX]Yj`Y`h`]gZ`h`]g`Wci fgY`i`h`]gYg`]bhi`fUW]j`Y`Y`W]i`fYgZ`]b!WUgg`UbX`ci`h`cZ`WUgg`UW]j`]h]YgZ`X]gW`gg]cbZ`cb`]bY`Yb[U[Ya`Yb]Z`UbX`Z]Y`X`gh`X]Yg`hc`YI`d`c`fY`WcbW]dhi U`UbX`dfUW]W]`ZUa Yk cf_g`Zc`f`YUXYfg\]d`]b`Ybj]fcba YbhiUbX`gcW]Y]m`

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K YY_`mF YUX]b[5ggYgga Ybh	(\$i	Bch5dd`]WUV`Y	%ž' ž(
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5XX]h]cbU`XYHJ]`g.

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

5ggYgga Ybh' . :]Y`X`Dfc`YWh

GHUfhXUH. Bch5dd]WUV`Y

8YHJ]`g.

:]Y`X`ghi XmcZU`gY`ZgY`YWhX`g]hY`k]h`[i]XUbW`Zca`]b]gf] Wcf"Hi fbYX`]b`k`cf_]bW] XYg`ZY`X`bchYgž`Ubgk`Yfg`hc`ZY`X`ei`Ygh]cb`[i]XYž`UbX`UbU`mg]g`cZg]hY`h`fci`[\`hY`YbgYg`cZfY`Yj`UbhWci`fgY`ZUa`Yk`cf_g"&\$\$\$`k`cfXg`]b`hc`hU"

h!dfcWgg`k`cf_g\cdd]b[" :]bU`ZYXVUW`dfcj`]XYX`UWw`fX]b[`hc`U`fi`Vf]W

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

: cf'a cfY`XYHJ]gžd`YUgY`fYZf`hc`hY`"5ggYgga Ybh`b]gf] W]cbg"XcW a YbhdcghYX`cb`hY`Wci fgY`A ccXY`g]hY"

Hi fb]h]b`gYH]b[. H\]g]Ugg][ba Ybh]g]gi Va]hYX`h`fci`[\`Hi fb]h]b`UbX`ghi XYbhg`Xc`bchgYY`Hi fb]h]b`g]a]Uf]mifYdcfrg"

fYZYWjcb'UWj jHYg"

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F YWca a YbXYX`F Ygci fWg

Mci `UFY`YI dYWX`hc`a U`_Y`[ccX`i gY`cZ`hY`fYUX]b[g`dfcj]XYX`Zc`f`hY`Wci fgYz`UbX`hc`fYUX`VYmcbX`hcgY`
a Uhf]U`g`Zc`f`mci f`Ugg][ba Ybhg`" :~~XYdYbXYbhfYgYUfW`~~]g`YI dYVWX`"

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

DUghYI dYf]YbW`UbX`ghi XYbhZYXVUW`_cb`hY`I B`GK`_cb`]bY`gi fj Ymfc`a`m9I dYf]YbW`_]bX]WUhg`hY`
]a dcftUbW`_cZghi XYbhg`Xc]b[`WcgY`UbX`WUfYZ`_`fYUX]b[`cZ`hY`k YY`_mUgg][bYX`fYUX]b[gZ`cZYb[U[YX`
ghi XYbhidUfh]WdUh]cb`]b`WUgg`X]gW`gg]cbgZ`UbX`cZghi XYbh]bXYdYbXYbhfYgYUfW`"

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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≠mci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UH'Ya dh]b['hc'gi Va]hirci f'Ugg][ba Ybhi'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'- ' ,) " ' ' %cf'Ya U] 'h'Ya 'cb'YI HYfbU'HY'hgi ddcfh i bgk "YXi "Ui "'Gi ddcfh

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[`h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`_`Y`a` `U`b`m`
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`H`Y` `W`X`Y`U`H]b[`h`c`U`W`W`Y`X`Y`b`h`U`m`i`W`c`d`m]b[`Z`c`a` `U`g`c`i`f`W`k`]h`c`i`h`U`W`b`c`k` `Y`X[`Y`a` `Y`b`h`

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci f'W'g'Dc']W'h
- VY'Uk UfY'cZ'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmcby']b'h'Y'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj]W'g'UbX']bZ'fa U'h'cb'UVci hi BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k]''VY'ZJa]]Uf'hc'mci ž'c'h'Y'fg'k]''VY'bYk " "; U]b]b['U'gc']X'i bXYfghUbx]b['cZU''h'Y fY'U'h'X'UgdY'W'g'cZ9@-G9'k]''\Y'd'mci 'a U_Y'h'Y'a cgh'cZ'mci f'gh X]Yg'Uhl BGK ""

[\h'hd. #gj V'Y'W'f i \]X'Y'g" \]V'f'U'f'm'i b'gk "Y'X'i "U'i # ' \]g'Y'# \]V'c'i h' \]g'Y](#)

5 WUXYa]W=Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.

- fYei Ygth]Zc`f`YI h`bg]cb/
- `Uh`gi Va]gg]cbg[[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`mdc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
-