

ARTS2363

7 \]bYgY`D\]`cgcd\m

HYfa `H\fYY`##`&\$&\$

7ci fgY`Cj Yfj]Yk

GHJZZ7cbHJW`8YHJ`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]UV]]m	@cW]h]cb	D\cbY
? Ufmb`@U]	_`"U]4 i bgk "YXi "Ui	Hi Yg`%%d%&ž'cf Ya U]`hc'cf[Ub]gY'Ub Uddc]bha Ybh	A 6' &* ž A cfj Yb'6fck b 6i]X]b[

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@cW]h]cb. 'GVXcc``C Z]WžA cfj Yb'6fck b'6i]X]b[ž'@Yj Y`&ž&),

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D\cbY. 'ž*%&'-',) '%*, %

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

7ci fgY'8YHJ]`g

7fYX]hDc]bqg`*`

Gi a a UfmicZ`h`Y'7ci fgY

h`h]g`Wci fgYz`mci`k]`gh`Xmi7`cbZ`W]Ub]ga`UbX'8`Uc]ga`fHuc]ga`Lz`d\]`cgcd\]Yg`k`\]W`cf]`]bUH`X`Z`ca
7\]bU'UbX`k`\]W`Wcb]bi`Y`hc`]bZi`YbW`h`b_]b[`UbX`dfUW]W`g`]b`7\]bU'UbX`VY`mc`bX`"Mci`k]`"U`gc`"YUfb
UVci`h`YggYf]_bck`b`7\]bYgY`d\]`cgcd\]Yg`]bW`X]b[`A`c\]ga`z`@Y[`U]ga`UbX'7\]bYgY`6i`XX\]ga`"H`Y
Wci`fgY`h]`Ygh[`UH`g`U`fUb[`Y`cZ`hd]Wg`]b`YUfm7\]bYgY`d\]`cgcd\]migi`W`Ug`Yh`]Wg`UbX`dc`]h]Wg`z
WcbW`dh]cbg`cZ`_bck`YX[`Yz`UbX`j`]Yk`g`cZ`fYU`]mi`UbX`h`Y`k`c`f`X`"K`Y`X]gW`gg`\`ck`h`Y`YUfm`h`]b`_Yfg`]b
7\]bU`h`ci`[`\`h`UVci`h`h`YgY`]ggi`Yg`UbX`X`fUk`g`cb`h`Y`f`]bg][`\`hg`hc`Yb`UbW`Wcb`h`Ya`dc`fUfm`XYV`UH`g`"
5`h`ci`[`\`h`Y`Wci`fgY`k`]`Z`W`g`cb`U`gh`X`mc`Z`h`f`U`X`]h`cb`U`7\]bYgY`d\]`cgcd\]Yg`z`]h`k`]`"U`gc`Wcbg]X`Yf
Wca`dUfU`h]`Y`YUgh`k`Yghd`Yfgd`YW]j`Yg`UbX`h`Y`f`Wcb`h`Ya`dc`fUfm`f`Y`j`UbW`"

Bchf.`Bc`dfYj`]ci`g`_bck`YX[`Y`cZ`7\]bYgY`W`h`fY`cf`Ub[`i`U[`Y`]g`Uggi`a`YX`"

7ci fgY`@YUfb]b[`C`i`h`Wca`Yg

%`Ufh]W`UH`h`Y`h`Ya`Yg`UbX`]ggi`Yg`fU]gYX`]b`h`Y`j`Uf]ci`g`h`f`U`X`]h]cbg`]b`YUfm7\]bYgY`d\]`cgcd\`m
&`]XYbh]Z`ma`Y`h`c`X`c`c`[`]Yg`UbX`d\]`cgcd\]W]`Uf[`i`a`Ybh]h]cb`]b`YUfm7\]bYgY`d\]`cgcd\`m
" `Yb[`U[`Y`]b`]bXY`dYbXYbh]UbX`fYZYW]j`Y`YUfb]b[`h`fci`[`\`UggYgg]b[`UbX`fYgdc`bX]b[`hc`]XYUg`]b
7\]bYgY`D\]`cgcd\`m
(`"YI`d`U]b`h`Y`Wcb`h`Ya`dc`fUfm]g][`b]Z]W]bW]`cZ`Ugd`YW]g`cZ`7\]bYgY`d\]`cgcd\`m
)`"Wca`a`i`b]W]h]cb`]XYUg`YZZYW]j`Y`m]b`Z`fa`U`UbX`]bZ`fa`U`k`f]h]b[`"

HYUWX]b[`G`h`f`U`h`Y`[`]Yg`

A`mi`h`Y`U`W`X]b[`]b`h`h]g`Wci`fgY`]g`j`Y`f`mia`i`W`X]bZ`fa`YX`V`mia`mi`fYgY`U`f`W`X]b`h`Y`U`f`Y`U`z`k`]h`g`d`Y`W]U`Z`W`g`cb`h`Y
]bh`f`U`W]h]cbg`V`Y`h`Y`Y`b`7\]bYgY`UbX`K`Ygh`f`b`d\]`cgcd\`m`H`Y`Wci`fgY`k`]`]b`f`c`X`i`W`mci`hc`i`d!`h`c!`X`U`h`Y
fYgY`U`f`W`X]b`7\]bYgY`UbX`Wca`dUfU`h]`Y`D\]`cgcd\`m`A`mi`U`dd`f`c`U`W`X]b[`]g`hc`]b]c`]Y`mci`Ug`Ub`U`W]j`Y
Y`U`fb`Y`f`Ug`a`i`W`X]b`Ug`dc`gg]V`Y`"A`mi`Y`W`h`fYg`z`cb`]b`Y`a`U`h`f]U`g`UbX`h`hc`f]U`g`U`f`Y`X`Y`g][`b`Y`X`Z`c`f`mci`hc`U`W]j`Y`m
Y`b`Wci`fU[`Y`X`hc`dUfU`h]dU`h`]b`W`U`gg`UbX`cb`]b`Y`X]g`W`gg]cbg`"H`Y`"Y`W`h`fYg`z`cb`]b`Y`a`U`h`f]U`g`UbX`h`hc`f]U`g`z`Ug`

5ggYgga Ybh

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5ggYgga YbhHUg_	K Y][\h	8i Y`8UHŸ	Gh XYbh@YUfb]b[Ci hWta Yg`5ggYggYX
F YZYW]cbg`UbX`E i]nnYg`	(\$i	&`C Wtc VYfz`%* `C Wtc VYfz`% Bcj Ya VYf	%ž&ž ž(
HYgh	&\$i	\$&#/#&#&\$&\$	%ž&ž)
F YgYUfW`9ggUm	(\$i	&+ #/#&#&\$&\$`%\$`DA	%ž&ž ž(ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`F YZYW]cbg`UbX`E i]nnYg`

GhUfhXUHŸ. `&`C Wtc VYfz`%* `C Wtc VYfz`% `Bcj Ya VYf

@Yb[h. `J Uf]ci g

8YHU]`g.

: cfa Uhj Y`UggYgga Ybh`H\]g`UggYgga YbhWta dcbYbh]g`Wta df]gYX`VmA ccXY`X]gW gg]cb`dcghž`a i `h!
Wc]W`UbX`g\cfhUbgk Yf`ei Ygh]cbg`]b`h`fY`gY`YWX`k`YY_g``H\Y`a`U]`ja`i`a`k`cfX`Yb[`h`Zcf`YUWX`]h`fU]cb
]g` \$`\$`k`cfXg``

H\YgY`UggYgga Ybh]g`UfY`hja`YX`VYhk`YYb`Y`W`h`fYg`UbX`h`h`fU]g`]b`fY`Yj`Ubhk`YY_gž`gc`h`Uhgh`XYbh]g`UfY
YbWci`fU[`YX`h`fYUX`h`Y`a`U`h`f]U`ž`UbX`h`h`b`_`h`fci`[`\`h`Y`Y`W`h`fYž`VYž`cfY`h`Ymi`U`h`Y`b`X`h`Y`h`h`fU]U``H\Y
h`h`fU]U`g`k`]``h`Yb`d`]W`_i`d`cb`gca`Y`cZ`h`Y`_Ymi`UbX`g][`b]ž`W]bhei`Ygh]cbg`fU]gYX`Vmigh`XYbh]g`Zcf`X]gW`gg]cb``
H\Y`gY`YWX`k`YY_g`k`]``VY`gYhci`h]b`h`Y`Wci`fgY`ci`h]bY``Gh`XYbh]g`k`]``fYW`]j`Y`]bX]j`]Xi`U`Z`YXVUW`_cb
h`Y]f`fYZYW]cbg``5`a`Uf_]b[`i`fi`Vf]W]g`i`gYX`h`c`[`i`]XY`gh`XYbh]g`cb`h`Y`a`Uf_]b[`W]h`fU]U``9`UWX`X]gW`gg]cb`k`]``
VY`[`fUXYX`ci`h`cZU`a`U]`ja`i`a`cZ`\$`a`Uf_gž`UbX`h`Y`h`fU]cZ`_`]h`fU]cbg`k`Y][`\`h`YX`h`c`(\$i` `

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

`cb]bY`Ugg][`ba`Ybh]b`A`ccXY`Xi`Y`cb`&`C Wtc VYfz`%* `C Wtc VYfz`% `Bcj Ya VYf`

Gi Va]gg]cb`bchYg.C b]bY`UggYgga Ybh

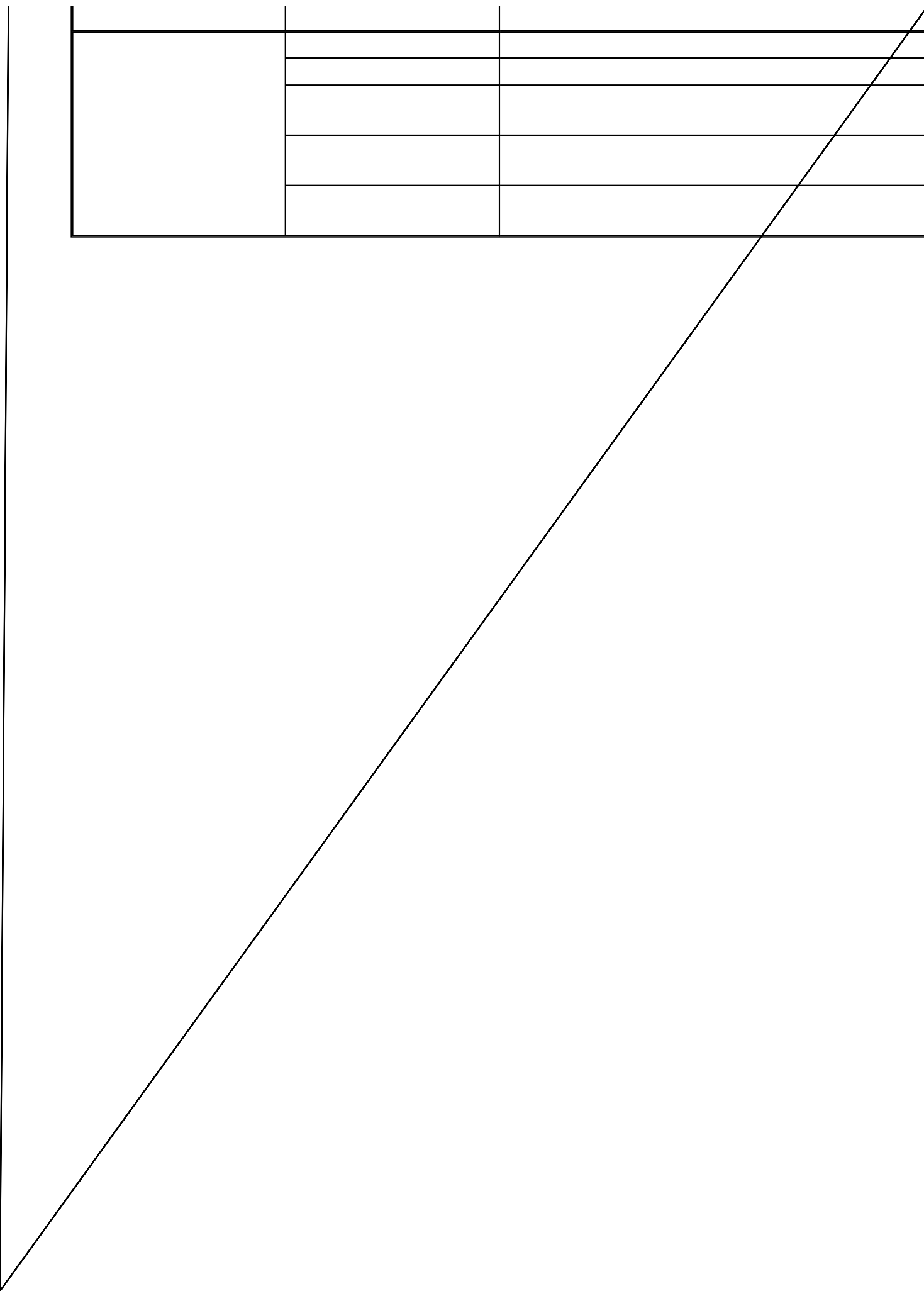
Hi fb]h]b`gYh]b[. `H\]g`]g`bchU`Hi`fb]h]b`Ugg][`ba`Ybh

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F YWca a YbXYX`gi dd`Ya`Yb]fmiFYUX]b[g`UfY`Uj U]V`Y`cb`@Y[Ub]cZj`]U`A`ccX`Y`"

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

H\Y`Wci`fgY`h]g`mYUf`k`j``]bWcfdcfU]h`a`cfY`Z]fgh`UbX`fYUX]b[`cZ]hY`hY]`hg``Gh`XYb]g`]b`dfYj`]ci`g`mYUfg`k`YfY`_YYb`hc`cc`_`Uh`hY`fUb[`Y`cZdf]a`Ufmi]hY]`hg``H\Y`WUggfcca`UbX`cb`]bY`hYUW]b[`Wca`dcbYb]g`k`]`dfcj`]XY`a`cfY`cddcfh`b]h]Yg`hc`Xc`h]g`"

H\]g`mYUfz`]bg]hYUX`cZ\Uj`]b[``\`ci`fg`YW]h`fY`Z`%`\ci`f`h`hcf]U`ž`k`Y`k`]``\Uj`Y`&`\ci`fg`YW]h`fY`Z`%`\ci`f`h`hcf]U`ž`%`\ci`f`cb`]bY`UW]j`]m`Gh`XYb]g`UghmYUf`ZY`h`h`U`h`h`Y` ``\`ci`f`YW]h`fY`g`ch`Y`Z`h`Ya`a`Yb]U`m`YI`\U`i`ghYX``=Uj`Y`hU`_Yb`hY`cddcfh`b]m]h`i`gY`hY`%`cb`]bY`\ci`f`Zi`]h`m`hY`cb`]bY`UW]j`]mž`Uj`U]UV`Y`Uh`hY`YbX`cZYUW]k`YY`ž`k`]`gYfj`Y`hc`Wcbgc`]XU]h`hY`k`YY`řj`X]gW`gg]cbg``#k`]`gYhci`h`hY`k`YY`řj`[`cU`g`UbX`ci`hWca`Yg`Ug`k`Y`Ug`dfcj`]XY`cddcfh`b]h]Yg`Zc`f`YI`hYbX]b[`WUgg`X]gW`gg]cbg`"

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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

Ʒmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UH'Ya dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'-',) " ' ' %cf'Ya U] 'h'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY', .\$\$Ua '—%\$.\$\$da 'cb'k YY_XUmg'UbX'-. \$\$Ua '—) .\$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'mYUfI" Ʒmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]h'Hi fb]h]b'mci 'a UmUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYhU]b'mci f'h]W_Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb['k]h'Ubmc'h'Yf'f'Yj UbhXcW a Yb'g'k'hc
]bWi XY'Ug'Yj]XYbVW'hc'gi ddcfhmc i f'YI HYbg]cb'Udd'j]W]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmc i 'k]
Ui 'ca U]W]m'f'YW]j' Y'U'h]W_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY'mci 'k]'b'Y'X'hc'gd'Y'W]W]m'Ug_'Zc'f'cbY"
Hi fb]h]b'U'gc'dfcj]XYg'i dXUH'g'cb'h'Y]f'gmgh'Ya 'ghU'g'cb'Hk]h'Yf"

; YbYfU'mž'UggYgga YbhiHUg_g'a i ghVY'gi Va]h'Y'X'Y'Y'W'f'cb]W]m'j]U'Y]h'Y'f'Hi fb]h]b'cf'U'A ccX'Y
Ugg][ba Yb'f' 'b]bg]h'Ub'V'W'g'k \YfY'h'g]g'bc'h'd'c'g'g]V'Yž'hk]'VY'gh'U'Y'X'cb'mci f'W'ci fgY'g'A ccX'Y'g]h'k]h
U'HY'fb'U'h] Y'gi Va]gg]cb'XYhU]g"

: cf]bZ'fa U]cb'cb'\ck 'hc'gi Va]h'Ugg][ba Yb'g'cb]b'Y'j]U'A ccX'Y. \h'hd'g.#gh XYb'hi bgk "YXi "Ui #ck!
gi Va]h'Ugg][ba Yb'ha ccX'Y

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`B`G`K` `[`f`c`i`d`g`d`U[]Uf]ga `]b`h`c` `h`Y` `Z`c` `c`k`]b[`W`U`h`Y`[`c`f`]Y`g.

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'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'j]b'hY'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj]W'g'UbX'j]bZ'fa U]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

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

[\hhd.##ji V'Y'W'i \]X'Yg''j\]VfUfm'i bgk "YXi "Ui #' \]gY#J'Vci h' \]gY](#)

