



ARTS2374

K Umj'cZF YUgcb]b[

Gi a a Yf'##'&\$&%

GWXcc``cZ< i a Ub]hYg`UbX`@Ub[i U[Yg`##` I BGK ``5ftg`UbX`GcWU``GWYbWg

7ci fgY'8YHJ`g

7fYX]hDc]bhtg '*`

Gi a a UfmicZ\hY'7ci fgY

H\Y'i bXYfghUbX]b[`kY`Uj Y'cZci f'buhi fY'Ug'fYUgcb]b[`VY]b[g]g'U'ZJgW]bU]b[`hcd]Wk \]W\ `Ug'WUdhj UH\X
h]b_Yfg'Zcf'hci gUbXg'cZmYUfg" `b'h]g'Vci fgY'k Y'k]`WXUfhi]hg` \]g]hcfmUbX'ZcW g'cb'hY'XYj Y'cda Ybhtg`]b
hY'fYW'bhdugh'H\]g'Vci fgY'Uja g'hc`]b]hcfXi VW' mci `hc'UbX'hc'XYj Y'cd'gca Y`_Ymg_]`g`]bj c`j YX`]b'W]h]WU`m
UggYgg]b[`UbX'XYj Y'cd]b[`Uf[i a Ybhtg" A cFY'VfcUX`nž'hY'Vci fgY'Uja g'hc'XYj Y'cd'g_]`g`UbX'UV`]h]Yg'hUh
UfY'YggYbh]U'Zcf'XYU`]b[`X]gW fg]j Y'mk]h'cdYb`]bhY`YVh] U`ei Ygh]cbg'UbX'Vca d'YI `dfUW]WU`]ggi Yg'UbX
dfcV'Ya g'cZa Ubm_]bXgž'UbX`]h]g'YI dYW]X'hUhrc'gi W]ggž `mVca d'YH'hY'Vci fgYžmci `k]`Uj Y
]a dfcj YX'mci f'UV`]m]hc'h]b_]Zcf'mci fgY'Z]b'U'k]XY'j Uf]YhmicZVcbhY] hg" `b'dUf]h]W'Ufžmci `k]`XYj Y'cd'hY
g_]`g'cZ]XYbh]Zm]b[`UbX'UbU'mg]b[`Uf[i a Ybhtg/cZVY]b[`UVY'hc`]XYbh]ZmidfYgi ddcg]h]cbg'cZei Ygh]cbg"

7ci fgY'@YUfb]b[`Ci hVca Yg

%` ðXYbh]ZmUf[i a Ybhtg`]b`YI hYbXYX'dUggU[Yg"
&" 5bU'mgY'UbX'UggYgg'Uf[i a Ybhtg"
' " : cfa i `UHž'UbU'mgY'UbX'fYgdcbX'W]h]WU`m]hc'dfcV'Ya gž'Uf[i a Ybhtg'UbX'dcg]h]cbg"
(" I gY'Zcfa U`a Yh'cXg'hc'U]X`]b'hY'W]h]WU`UbU'mg]g'cZUf[i a Ybhtg'UbX'hY]f'fYdfYgYbh]h]cbg"
)" 5dd'mUbU'm]h]WU`g_]`g'hc'WUgY'ghi X]Yg"

HYUW\]b[`GhfUH[]Yg`

H\]g]g'Ub'i ddYf'Yj Y`Vci fgY'gi]hUV'Y'Zcf'mci `]Zmci `k]g\`hc'XYj Y'cd'mci f'ck b'i bXYfghUbX]b[`cZ\hY'i gY
UbX'UbU'mg]g'cZUf[i a Ybhtg"``

5ggYgga Ybh

GYY`A ccXY`Zf`XYHJ]g

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y`8UH`	Gh XYbh`@YUfb]b[Ci hWta Yg`5ggYggYX
9I YfW]gYg`	* \$i	Bch5dd`]WUV`Y	%ž`&ž` ž`(`
9I Ua `	(\$i	\$) #&#&\$&%\$- .\$\$`5A	%ž`&ž` ž`(`ž`)

5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`9I YfW]gYg

GHUfhXUH`. Bch5dd`]WUV`Y

@Yb[h. `(`%)`a]bg

8YHJ]`g.

H\YfY`k]`VY`Zci f`a i` h]d`Y`Wxc]W`hY`gfg` \Y`X`]b`h` hcf]U`gž`YUW` `Ugh]b[`WU`` ` \$`a`]bi` hYg` E`i` Ygh]cbg`k]`VY`
 VUgYX`cb`a` UHf]U`dfYgYbhYX`]b`Y`W`i` fYg`UbX`gY`Y`W`h`X`fYUX]b[g`Z`ca` `Ugg][bYX`fYUX]b[g`H\Y`YI`YfW]gYg`
 k]`hY`ghmci` f`i` bXYfg]UbX]b[`cZ`W`i` fgY`W`b`h`Y`bh]UbX`UfY`YUW`k`cf`h`%)`i` `cZ`h`Y`Z]bU`a`Uf`_`Gh`XYb]g`
 fYW`j`Y`U`a`Uf`_`UbX`h`Y`W`b`fY`W`i`Ub]gk`Yfg`]b`WUgg`X]gW`gg]cb`"

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

H\YgY`UfY`Zci`f`f(`E`g`cf`hei`]nnYg`]b`h` hcf]U`WUggYg`fgY`WUgg`gW`YXi` `Y`E`9UW`hU`Yg`" ` \$`a`]bg`"

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

5ggYgga Ybh&.`9I Ua

GHUfhXUH`. \$) #&#&\$&%\$- .\$\$`5A

@Yb[h. `&`\ci`fg

8YHJ]`g.

H\]g`&`\ci`f`YI`Ua` `W`j`Yfg`U`h`Y`k`cf`_`W`j`YfYX`]b`h`Y`W`i` fgY`UbX`]bj`c`j`Yg`a`i` h]d`Y`Wxc]W`UbX`g`cfh`
 Ub]gk`Yf`ei`Ygh]cbg`"Gh`XYb]g`fYW`j`Y`U`a`Uf`_`H\]g`]g`h`Y`Z]bU`UggYgga`YbhZcf`U`h`Y`bX`Ub]W`di`fdcgYg`"

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

GYY'A ccX'Y'g]h'Zcf'XYHJ]g'cZZ]bU`YI Ua "

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

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

GYY`A ccX`Y`g]h`Zcf`WUgg`bch`g"

F YWca a YbXYX`F Ygci fWg

GYY`A ccX`Y`Zcf`cb`]bY`fYgci fWg`]bWi X]b[`k YV`UWij]hYg`Zcf`g_]``XYj Y`cda Ybh`

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

K Y`k]``VY`i`g]b[`A m9l dYf]YbW`h`c` gg`gli XYbhj]Yk`g`UbX`k]``VY`UX↑ gh]b[`hcd]Wg`UbX`fYgci fWg
hU_]b[`h\cgY`j]Yk`g`]bhc`UW`ci bh`

Gi Va]gg]cb`cZ5ggYgga YbhiHUg_g

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

Ʒmci`YbWci`bHYf`U`dfcV`Ya`k`\\Yb`UHYa`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiHfci`[`\\`Hi`fb]h]b`z`d`YUgY`
HY`Yd`\\cbY`9I`HYfbU`Gi`ddcfhcb`-`,`)`"``'``%cf`Ya`Uj`h`Ya`icb`YI`HYfbU`HY`hgi`ddcfh4`i`bgk`"YXi`"Ui`"Gi`ddcfh`
\\ci`fg`UfY`,`.\$\$Ua`-`-%\$.\$\$da`icb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`icb`k`YY`YbXg`f1`*)`XUmg`U`mY`Uf2`Ʒmci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiXi`Y`hc`U`ZU`ihk`]h`Hi`fb]h]b`mci`a`UmUdd`mZc`f`Ub`YI`HYbg]cb`z`Vi`hmc`i`
a`i`ghfYhU]b`mci`f`h]W`Yhbi`a`VYf`Zca`9I`HYfbU`Gi`ddcfhU`cb[`k`]h`Ubmc`h`Yf`fY`Yj`UbhXcW`a`Yb]gk`hc`
]bWi`XY`Ug`Yj`]XYbVW`hc`gi`ddcfhmc`i`f`YI`HYbg]cb`Udd`]W]h]cb`"Ʒmci`Ya`Uj`9I`HYfbU`Gi`ddcfhmc`i`k`j`
Ui`hca`U]WU`mifYW]j`Y`U`h]W`Yhbi`a`VYf`z`Vi`h]Zmci`HY`Yd`\\cbY`mci`k`j`bYYX`hc`gdYW]Z]WU`mUg`Zc`f`cbY`
Hi`fb]h]b`U`gc`dfcj`]XYg`i`dXUH`g`cb`h`Y]f`gmghYa`g`hU`h`g`cb`Hk`]hYf`"

;`YbYfU`mz`UggYgga`YbhiHUg_g`a`i`ghVY`gi`Va`]hYX`Y`YWfcb]WU`mj`]U`Y]h`Yf`Hi`fb]h]b`cf`U`A`ccX`Y`
Ugg][`ba`Ybhi`h`]bg]hU`bVW`g`k`\\YfY`h`g`]g`bchidcgg]V`Yz`]hk`j`VY`ghUHYX`cb`mci`f`Wci`fgY`g`A`ccX`Y`g]h`k`]h`
U`HYfbU]h]`Y`gi`Va`]gg]cb`XYhU]g`"

:`cf]bZcfa`U]cb`cb`\\ck`hc`gi`Va`]hUgg][`ba`Yb]g`cb]bY`j`]U`A`ccX`Y`.\\`hdg`#gh`XYbhi`bgk`"YXi`"Ui`#ck`!
gi`Va`]hUgg][`ba`Yb]h`a`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'Wcdmf][\hžI 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`]b'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj]W'g'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 ""
[\hhd.##ji V'YWf i \]XYg" \]VfUfm'i bgk "YXi "Ui #' \]gY#JVci h' \]gY](#)

5 WUXYa]WbZcfa Uh]cb

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

- fYei Ygh]Zcf`YI H`bg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I B GK `<YU`h`UbX`GUZY`midc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
- gdYW]U`W`bg]XYfUh]cb`]b`hY`Yj YbhcZ]`bYgg`cf`a]gUXj Ybh fY/
- gh XYbhYei]mUbX`X]gUV`]m/
- UbX`c`hYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY