

ARTS2464

7 \]bYgY` ðYUg`cZ6YUi` m'UbX`9fch]WU. `5bW]Ybhÿ`A` cXYfb

HYfa`C`bY`#`&\$&%

7ci fgY`Cj Yfj]Yk

GHJZZ7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]UV]]m	@cWJhcb	D\cbY
5#DfcZ`D]b[`K Ub[d"k Ub[4 i bgk "YXi "Ui	Vm5ddc]bħa Ybh	A 6&' *	- ' ,) ' () %

GWXcc``7cbHJW`bZcfa Uh]cb

GWXcc``cZ<i a Ub]hYg`UbX`@Jb[i U[Yg

@cWJhcb. `GWXcc``C ZWZA cfj Yb`6fck b`6i]X]b[ž@Yj Y``&ž&),

CdYb]b[`<ci fg. `A cbXUm! : f]XUmž- Ua `!') da

D\cbY. `Ž*%&`-' ,) `)*, %

: UI. `Ž*%&`-' ,) ; , +\$)

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

7 ci fgY'8YHJ]`g

7 fYX]h'Dc]bHg '*`

Gi a a UfmcZh\Y'7 ci fgY

H\]g'Wci fgY'g'XYg][bYX'hc'YI d'cfY'h\Y'YI dYf]YbW'g'UbX'fYdfYgYbHJ]cbg'cZVYUi lm]b'7 \]bYgY'W'hi fY''K Y

H\fc i [\ci h\Y`Wci fgYž`WUgg`X]gW gg]cb`]g`YbWci fU[YX`hc`a U]bU]b`mci f`]b\YfYghUbX`Yb\i g]Uga`]b`h\Y
Wci fgY"

5ggYgga Ybh

5`XYHJ]g`cZfY`Yj Ubh]bZcfa Uhcb`cZWci fgY`UggYgga Ybhk]`VY`dfcj]XYX`cb`hY`7 ci fgY`A ccX`Y`Ug`k Y` Ug`]b`WUgg"

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y`8UH	Gh XYbh@YUfb]b[Ci hWca Yg`5ggYggYX
F YgYUfW`9ggUm	(\$i	%%#\$(#&\$&%%%\$`DA	%ž`&ž' ž(ž)
DfYgYbhUhcb`UbX`8]gW`gg]cb`	(\$i	J Uf]ci g	%ž`&ž' ž)
:]bU`9i Ua`	&\$i	&' #\$(#&\$&%%%\$`DA	&ž' ž)

5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`F YgYUfW`9ggUm

8YHJ]`g.

Gh XYbhg`YUW`k f]h`U`fYgYUfW`YggUmfl \$\$\$!`) \$\$`k cfXgE`cb`hY]f`gY`YWYX`hcd]Wrc`VY`gi Va]hYX`cb!]bY"
: YXXVUW_j]U`fi Vf]WUg`k Y`Ug`]bX]j]Xi U`UbX`]b!WUgg`Wca`a Ybhg

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

8YHJ]YX`]bZcfa Uhcb`UVci h`h]g`UggYgga Ybhk]`VY`dfcj]XYX`cb`hY`7 ci fgY`A ccX`Y`Ug`k Y`Ug`]b`WUgg"

Hi fb]h]b`gYh]b[. H\]g`Ugg][ba Ybh]g`gi Va]hYX`h`fci [\`Hi fb]h]b`UbX`gh XYbhg`WUb`gYY`Hi fb]h]b`ga]Uf]m`fYdcfg"

5ggYgga Ybh&`DfYgYbhUhcb`UbX`8]gW`gg]cb

8YHJ]`g.

9UW`[fci`d`cZgh XYbhg`W`ccgY`h`c`Uf]h]WYg`Zca`h`Y`Wci fgY`fYUX]b[`a`UHf]U`ž`UbX`dfYgYbh]hY]f`gi`a`a`Uf]Yg`UbX`UbU`mg]g`#fYZYW]cbg`fUddfcI`")`a`]bi`hYg`dYf`dYfgcbE`]b`h`h`cf]U`g`fl`\$i`E":`YXXVUW_j]U`fi`Vf]WUbX`]b!WUgg`Wca`a`Ybhg"

DUfh]WdUhcb`]b`k`YY`_m`WUgg`X]gW`gg]cbg`k`]`U`gc`VY`hU`Yb`]brc`Wcbg]XYfUhcb`f%\$i`E`

Gh XYbhg`k`]`fYW]j`Y`Ub`]bX]j]Xi U`a`Uf`_Zc`Vc`h`dfYgYbhUhcb`UbX`X]gW`gg]cb"

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

'H\Y' [fci d' dfYgYbhUjcbg' fl \$i - Ek]'' VY' VUgYX' cb' h'Y' h'UW\]b['gW\YXi 'Yžgc' h'Y' dfYgYbhUjcb' h'ja Y' Zc'f
YUW\ [fci d' a Umj UfmfK YY_) 'h' fci [\ 'h' 'K YY_ - Ł' 'XYdYbX]b['cb' h'Y' f'YUX]b['a U'h'f]U'g' YUW\ [fci d
W\ccgYg''

H\Y' c'h'Y'f'%'\$i ' f'eb']bX]j]Xi U' VUg]gŁ' [cYg' h'c' k YY_ 'm'WUgg' X]gW' gg]cbgž

5ggYgga Ybh' . :]bU' '9I Ua

8YhU]`g.

5b']b' WUgg' h'Y'ghW'cbg]gh]b['cZ'k c' h'ndYg' cZei Ygh]cbg' h'U'h'f'Yei]fY' Y]h'Y'f'g' \c'f'h'Ubgk Yfg' c'f' gca Y' UbU'ng]g
f%') \ci fgŁ''

: YYXVUW_ i dcb' f'Yei Ygh'

5XX]h]cbU' XYhU]`g.

8YhU]YX']bZc'fa Uh]cb' UVci h'h']g' UggYgga Ybhk]'' VY' d'fcj]YX' cb' h'Y' '7 ci fgY' A ccX' Y' Ug' k Y'' Ug']b' WUgg
k Y'']b' UXj UbW''

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

5`hY`YI dYWX`fYUX]b[`a UHf]U`k]`VY`dfcj]XYX`cb`hY`7 ci fgY`A ccX`Y"

F YWca a YbXYX`F Ygci fWg

F YWca a YbXYX`fYgci fWg`k]`U`gc`VY`dfcj]XYX`cb`hY`7 ci fgY`A ccX`Y"

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

H\]g`Wci fgY`k]`VY`Zcfa U`mYj U`i UH`X`h`fci [`A m9I dYf]YbW`Z`Ug`k Y`Ug`]bZcfa U`mXi f]b[`hY`
k \c`Y`h`UW`]b[`dfcVWgg""5bm]ggi Yg`fU]gYX`]b`ghi XYbhfZ`YXVUW`k]`VY`UXXfYggYX`Z`UbX`ghfUH`[]Yg`
hc`Z`fhYf`Yb\UbW`ghi XYbhfYUfb]b[`YI dYf]YbW`k]`VY`X]gW`ggYX`]b`WUgg"

Gi Va]gg]cb`cZ5ggYgga YbhiHUg_g

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

≠mci`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`≠mci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiXi`Y`hc`U`Zji`hk`]h`Hi`fb]h]b`mci`a`UmUdd`m`Zc`f`Ub`YI`HYbg]cb`z`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`fY`Yj`UbhXcW`a`Ybhtg`L`hc`
]bWi`XY`Ug`Yj`]XYbVW`hc`gi`ddcfhmc`i`f`YI`HYbg]cb`Udd`]W]h]cb`≠mci`Ya`Uj`9I`HYfbU`Gi`ddcfhmc`i`k`]`
Ui`hca`U]WU`mifYW]j`Y`U`h]W`Yhbi`a`VYf`z`Vi`h]Zmci`HY`Yd\cbY`mci`k`]`b`YYX`hc`gd`YW]Z]WU`mUg`_`Zc`f`cbY`
Hi`fb]h]b`U`gc`dfcj`]XYg`i`dXUH`g`cb`h`Y]f`gmgh`Ya`g`hU`h`g`cb`Hk`]hYf`"

;`YbYfU`mz`UggYgga`YbhiUg_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`]bghU`bVW`g`k`\YfY`h`g`]g`bchdcgg]V`Yz`]hk`]`VY`gh`UH`X`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`Uh]cb`cb`\ck`hc`gi`Va`]hUgg][`ba`Ybhtg`cb`]bY`j`]U`A`ccX`Y`. \`h`hdg`#`gh`XYbhi`bgk`"YXi`"Ui`#ck`!
gi`Va`]hUgg][`ba`Ybhta`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]]hYg'Ug'U'gh XYbhUhl BGK
-

5 WUXYa]WbZcfa Uh]cb

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

- fYei Yghg`Zcf`YI H`bg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<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

[\ftdg.#k k k "Uftg"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]UWUXYa \]W\]bZcfa Uh\]cb#dfchW`g`\[i \]XY`\]bYg#](#)

⇒ U[Y`7 fYX]h

G\i H`Yfg`hW_

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7cXY.`\$\$\$- ;

5W_bck `YX[Ya YbhcZ7ci bhfm

K Y`UW_bck `YX[Y`hY`6YXY[U`dYcd`Y`k \c`UfY`hY`fUX]h]cbU`W`ghcX]Ubg`cZ`hY`UbXg`cb`k \]W`I BGK
? Ybg]b[`tc`b`W]a`di`g`]g`c`W]hYX"