



ARTS2091

A cV]Y`7i `h fYg

HYfa `Hk c`#`&\$&%

GWcc`cZH Y`5ftg`UbX`A YXJU`#`I BGK`5ftgž8YgJI b/`5fWXJhVWñ fY



7 ci fgY`Cj Yfj]Yk

GHJZZ'7 cbHJW`8YHU]`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]'UV']]m	@cWU]cb	D\cbY
A]WXY`Y`NUddUj]] bU	a "nUddUj]] bU4 i bgk "YXi "Ui	VmUddc]bħa Ybh	K YVg]Yf' %%F	

GW\cc`7 cbHJW`bZcfa Uh]cb

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D\cbY. f\$&Ł-' ,) '(,) *

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

K YVg]Y: [k k k "Ufmg"i bgk "YXi "Ui #gUa](#)

H\Y`GW\cc`cZħY`5fmg`UbX`A YX]U`k ci `X`]_Y ħc`F YgdYWw`m5W_bck`YX[Y`ħY`HfUX]ħcbU`7 i għcX]Ubgž ħY`6YXY[U`fP`Ybg]b[ħcb`WJa di gŁž; UX][U`f7]mUbX`5fñ/ `8Yg][b`7 Ua di gYgŁ`UbX`ħY`B [i bbUk U` dYcd`Y`f5i għfU]Ub`8YZYbW` : cfW`5WUXYa m]b`7 UbVYffUŁcZħY`UbXg`k \YfY`YUW`WJa di g`cZI`BGK`]g`cWUħY`X"

7 ci fgY'8YHJ`g

7 fYX]hDc]bHg '*`

Gi a a UfmicZhY'7 ci fgY

A YX]U'UFY`]bWYUg]b[`m dcfUUV'Yza cV]Yz'bytk cf_YX'UbX'i V]ei]hci g" '6i hik \UhUFY'hY'WcbX]hcbg'hUh\Uj Y
[] Yb'fgY'hc'hYgY'bYk'a YX]U'hYVXbc`c[]Yg'UbX'dfUW]WgZ'UbX'\ck'a][\hk Y'fYgdcBx'hc'bYk'a cV]Y
bYtk cf_g'UbX'Zcfa g'cZdUfh]WdUh]cb'hUha cV]Y'a YX]U'U'ck 3'H\]g'Wci fgY`]bj Ygh[UH'g'a cV]Y'a YX]U`]b
hY'WcbhYI hicZhY'dYfj Ugg] YbYgg'cZa cV]]m]b'a cXYfb`]Z'UbX'hY'k UmhUhH'VXbc`c[mYbUV'Yg'UbX
Wcbf'c'g'U`]bXg'cZa cV]Y'W'h'fYg" Mci 'k]`VY'UVY'hc`]bj Ygh[UH'hY'W ffYbhghUHY'cZd'Um]b'hY'a cV]Y
a YX]U'UbXgWUdY'UbX'WcbhYI hi U]gY'mci fi bXYfghUbX]b[]b'U'VfcUX'W'h'fU'z'\]ghcf]WZ'UbX'hYcfYh]W'
WcbhYI h'K'Y'k]`ZcW'gZ]b'dUfh]W'Ufz'cb'hY'XYg][b'UbX'i gY'cZU'fUb[Y'cZa cV]Y'UddgZ'Ug'k Y`Ug'hY
]bXg'cZWca a i b]W]h]cb'hUhIdYcd'Y'i gY'Uddg'hc'dfcXi W'`H\]g'k]`]bj c'j Y'h]b]b['W]h]W`mUVci hUddg
UbX'hY'X]gWci fgYg'hUhgi ffc i bX'hYa "

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

% 5dd'miU'a cV]]hYg'ZUa Yk cf_`hc'WcbhYa dcfUfmhYVXbc`c[]W'UbX'gcWU'WcbZ[i fU]hcbg
&" #j Ygh[UH'hY'a YUbg'VmK \]VX'X]ZYfYbhfY[]a Yg'cZdck Yf'cdYfUHY'hc'g\UdY'i bXYfghUbX]b[g'UbX
YI dYf]YbW'g'cZha Y'UbX'gdUW
' " K cf_`Wc`UVcfU]h] Y'm]b[fci dg'hc'ZUW]hUHY'hY'YUfb]b[`cZchYf'ghi XYbHg
(" DfcXi W'U'\[\`Yj Y`cZUWXYa]WfYgYUfVX'UbX'k f]h]b[

HYUWX]b[`GhfUHY[]Yg`

F U]h]cbU'Y.

H\Y'a YX]UgWUdY'\Ug'VXUb[YX'XfUa U]h]W'`m]b'fYW'bhXYWUXYg" H\Y'YI dcbYbh]U`[fck h'cZ[`cVU'hfUj Yz
hY'f]gY'cZhY']bh'fbYhUbX'hY'i dU_Y'cZa cV]Y'd\cbYg'UbX'dYfgcbU'a YX]U'd'UmYfg'\Ug'Z' bXUa YbhU`m
U'h'fYX'ci f'Yj YfmXUm`j YgZ'ci f'gcW]Ym]UbX'ci f'gYbgY'cZgY'Z'

H\]g'Wci fgY`]g'XYg][bYX'hc'Ugg]ghgh XYbHg]b'WcbW'dh U`n]b['h\]g'a ca YbhicZfUX]W'fYWcbZ[i fU]hcb"
A c]]b['Uk Um]Zca 'hfUX]h]cbU`gh]h]Wa cXY'g'cZa Ugg]a YX]U'hc'k UfXg'hYcf]nU]h]cbg'Ya d\Ug]n]b['a cV]]mZ
WcbbYW]j]m]UbX'dYfgcbU`nU]h]cbZ'h\]g'Wci fgY`]g'XYg][bYX'hc` []j Y'hY'gh XYbHg'hY'i d!hc!XUHY
i bXYfghUbX]b[`cZWcbhYa dcfUfma YX]U'hUh'hYmk]`bYX'hc'VYWca Y'gi W'W'ggZ `a YX]U'dfUW]h]cbYfg" H\]g
Wci fgY'XcYg'bchdf]a Uf]mZcW'g'cb'gdYW]Z]Wa cV]Y'hYVXbc`c[]Yg'fk \]VX'hYa gY'j Yg'k]`VY'ci ha cXYX
g\cfhmZ'Vi hfU'hYf'gYY_g'hc'dfcj]XY'Ub'Uddfcdf]UHY'UbX'fY'Yj UbhUWXYa]WZUa Yk cf_`Zc'f'ghi XYbHg'hc
Yb[U[Y'k]h'UbX'XYj Y'cd" H\Y'UggYgga Ybhg]b'h\]g'Wci fgY'UFY'XYg][bYX'hc'dfca ch'U'XYXd Yb[U[Ya Ybh
k]h'hY'_Ym'hYcfYh]W'WcbW'dhg'UbX'hYcf]ghg'Ug'k Y`Ug'hc'YbWci fU[Y'gY'ZfYZI]j Y'UbX'Wc`UVcfU]h] Y
'YUfb]b["

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%) \$!&\$\$\$'k cfXg"

Gh XYbŸg'k f]Ÿ'Ub YggUmXYU`]b['k]Ÿ'Uh`YUghcbY'cZŸŸ_YmŸŸbŸŸdŸŸŸ'ŸŸj YfYX`]b'ŸŸY'ŸŸi fgY"

: YYXVUW_j]U`@A G

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5ggYgga Ybh& 'HU_Y!\ca Y'9I Ua

GHŸfhXUHŸ. '\$) #\$, #&\$&%\$- . \$\$'5A

8YHJ]`g.

&) \$!k cfX'Ÿ_Y!\ca Y'YI Ua "

: YYXVUW_j]U`@A G

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H\]g'g'Ub'cdYbVcc_`Ÿ_Y!\ca Y'YI Ua 'ŸŸUh]g'fY`YUgYX'cb'\$) #\$, #&\$&%\$- . \$\$'5A 'UbX'g]ŸŸYb'Xi Y'j]U
Hi fb]Ÿb'cb'\$* #\$, #&\$&%%%) - 'DA "

Hi fb]Ÿb'gYŸŸb[. H\]g'Ugg][ba Ybh]g'gi Va]ŸŸX'ŸŸfci [\ 'Hi fb]Ÿb'UbX'gh XYbŸg'Xc' bchgYY'Hi fb]Ÿb'g]a]Uf]mŸfYdcfŸg"

K YY_%.&'5i [i gh! '* 5i [i gh	K YV Hi hcf]U'	9d\Ya YfU`a cV]Y`a YX]U C b`]bY`hi hcf]U`j]U`K YV7 H`cb`A ccX`Y. 9I d`cf]b[`Yd\Ya YfU`a YX]U`bcfa g"
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F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

H\Y`hI hVcc_`Zcf`h]g`Wci fgY`]g.

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h]g`Uj U]UV`Y`Ug`Ub`Y!Vcc_`j]U`hY`"VfUfmcf`Ug`U`df]bhVcc_`]b`hY`I BGK `Vcc_g\cd"

F YWca a YbXYX`F Ygci fWg

F YWca a YbXYX`fYgci fWg`k]`VY`]bW` XYX`]b`hY`fYUX]b[``]ghcb`A ccX`Y`j]U`@Y[Ubhc"

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

: YYXVUW_`Zcf`h]g`Wci fgY`k]`VY`[Uh`YfYX`Vch`]bZcfa U`nž`]b`h hcf]U`gž`UbX`Zcfa U`nž`j]U`hY`a m9I dYf]YbW`
gi fj YmbYUf`hY`YbX`cZgYa YghYf"

h`dfYj]ci g`mYUfg`gh XYbhg`Uj Y`Ug_YX`Zcf`V`YbXYX`YUfb]b[`k]h`YW`fYg`X`Y`j YfYX`cb`]bY`"=\Uj Y
fYgdcbXYX`hc`h]g`ZYXVUW_`VmcZYf]b[`cb`]bY`YW`fYg`H\Y`YW`fY`k]`VY`XY`j YfYX`Ug`g\cfhj]XYcgž
U`cb[`k]h`chYf`fYgci fWg`gi W`Ug`a i`h]a YX]Užei]nnYg`f`c`a U_Y`gi fY`mci `i bXYfg]UbX`hY`a UfYf]U`Ug
k Y`a cj Y`h`fci [\`hY`Wci fgY`ž`UbX`]b_g`hc`YI Ua d`Yg`cZa cV]Y`a YX]U`i gY"

Gi Va]gg]cb`cZ5ggYgga YbhiHUg_g

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

~Zmci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UHYa` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiHfci`[`\`Hi`fb]h]bzd`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`fI`*)`XUmg`U`mY`UfI`~Zmci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiXi`Y`hc`U`ZU`ihk`]h`Hi`fb]h]b`mci`ia`UmUdd`mZc`f`Ub`YI`HYbg]cbz`Vi`hmc`i`
a`i`ghfYhU]b`mci`f`h]W`Yhbi`a`VYf`Zca`9I`HYfbU`Gi`ddcfhfU`cb[`k`]h`Ubmc`h`Yf`fY`Yj`UbhXcW`a`Ybhtg`hc`
]bWi`XY`Ug`Yj`]XYbVW`hc`gi`ddcfhmc`i`f`YI`HYbg]cb`Udd`]W]h]cb`~Zmci`Ya`Uj`9I`HYfbU`Gi`ddcfhmc`i`k`j`
Ui`hca`U]W]mifYW]j`Y`U`h]W`Yhbi`a`VYfz`Vi`h]Zmci`HY`Yd\cbY`mci`k`j`bYYX`hc`gdYW]Z]W]mUg`Zc`f`cbY`
Hi`fb]h]b`U`gc`dfcj`]XYg`i`dXUH`g`cb`h`Y]f`gmgh`Ya`ig`hU`h`g`cb`Hk`]hYf`"

;`YbYfU`mz`UggYgga`YbhiUg_g`a`i`ghVY`gi`Va`]hYX`Y`YWfcb]W]m]j`]U`Y]h`Yf`Hi`fb]h]b`cf`U`A`ccX`Y`
Ugg][`ba`Ybhi`h]b]bg]h]bVW]g`k`\YfY`h`g`]g`bchdcgg]V`Yz`]hk`]`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`Uh]cb`cb`\ck`hc`gi`Va`]hUgg][`ba`Ybhtg`cb]bY`j`]U`A`ccX`Y`. \hhdg.#gh`XYbhi`bgk`"YXi`"Ui`Ack`!
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
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