

## ARTS2383

9h]Wg. 'H\YcfmUbX'DfUWjWY

HYfa 'H\fYY'##'&\$&\$

GWcc``cZ< i a Ub]hYg'UbX'@Ub[ i U[ Yg'`# 'I BGK ``5ftg'UbX'GcWU'`GWYbWYg

7ci fgY`Cj Yfj JYk

GHJZZ7cbHJW`8YHU]`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]UV]J]m	@cW]h]cb	D\cbY
>YfYa mA cgg	^a cgg4 i bgk "YXi "Ui		A 6' &&	- ' , ) &' ) +

@YW`i fyfg

B Ua Y	9a U]	5j U]UV]J]m	@cW]h]cb	D\cbY
8Ub]Y`6i f_Y]h	XUb]Y`"Vi f_Y]h4 i bgk "YXi "Ui	6miUddc]b]h Ybh	A 6' %	- ' , ) &\$' (

GW\cc``7cbHJW`bZcfa Uh]cb

GW\cc``cZ<i a Ub]h]Yg`UbX`@Ub[ i U[ Yg

@cW]h]cb. `GW\cc``C Z]W]Z`A 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

7fYX]hDc]bng`\*`

Gi a a UfmicZhY'7ci fgY

þ`h]g`Wci fgY`mci`k`j`Wcbg]XYf`gca`Y`cZ`hY`a`cghd`fYgg]b[ `dfUW]WU`Yh]WU`]ggi`Yg`ZUW`X`Vm`gc`W]Ym`Ub`X`Vm]b`X]j`]Xi`U`d`Ycd`Y`]b`h`Y`f`Y`j`Yfm`XUm`]j`Yg`"K`Y`k`j`"Ub`U`mg`Y`h`Y`Y`h]WU`Uf[ `i`a`Yb`ng`VY`\\b`X`]ggi`Yg`gi`W`Ug`fVi`hbch`ja`]h`X`h`c`L`W]a`UH`W`X`Ub[ `Y`z`]b`h`f`b`U`h`c`b`U`U`X`z`h`Y`a`Uf`\_`Y`h`z`b`Y`k` `h`V`X`b`c`c`[ `]Y`g`c`f`X`]g`U`V`]m`H`Y`Wci`fg`Y`k`j`]b`f`c`Xi`W`mci`h`c`\_`Y`m`W`c`b`W`d`f`g`]b`Y`h]W`g`gi`W`Ug`f`Y`g`d`c`b`g`]j`]m`z`↑`g`h]W`U`b`X`k`Y`!`V`Y`b[ `"]M`ci`k`j`V`Y`Y`b`W`ci`f`U[ `Y`X`h`c`Y`I`Ua`]b`Y`mci`f`c`k`b`Y`h]WU`V`Y`]Y`Z`g`]b`h`Y`"][ `h`c`Z`h`Y`g`Y`W`c`b`W`d`f`g`U`b`X`W`c`b`g]X`Y`f`h`Y`f`c`Y`h`U`h`Y`h]W`g`W`b`d`U`m]b`Y`j`Y`fm`X`Um`]Z`"

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

%" ⇒Ybh]ZmUbX`YI`d`U]b`h`Y`a`U]b`Y`h]WU`]ggi`Yg`h`U`h`U`f]g`Y`k`\\Y`b`W`c`b`g]X`Y`f]b[ `h`c`d]W`g`]b`U`d`d`]Y`X`Y`h]W`g`U`b`X`ci`f`]b`X]j`]Xi`U`W`c`"Y`W`h]j`Y`c`V`][`U`h]c`b`g`h`c`d`f`c`X`i`W`Y`Z`Y`W`h]j`Y`W`X`U`b[ `Y`"  
&" 5dd`md`\\]c`g`c`d`\\]W`U`a`Y`h`c`X`g`h`c`Y`I`Ua`]b`Y`U`b`X`Y`j`U`i`U`h`Y`j`U`f]c`i`g`X]a`Y`b`g]c`b`g`c`Z`U`b`]ggi`Y`d`Y`f`h]b]b[ `h`c`h`c`d]W`g`]b`U`d`d`]Y`X`Y`h]W`g`"  
' " 8]g`h]b[ `i`]g`\\`U`b`X`Y`j`U`i`U`h`Y`Z`Ua`Y`k`c`f`\_`g`Z`c`f`d`Y`f`g`c`b`U`U`b`X`W`c`"Y`W`h]j`Y`X`Y`W]g]c`b`a`U`\_]b[ `]b`f`Y`U`h]c`b`h`c`h`c`d]W`g`]b`U`d`d`]Y`X`Y`h]W`g`"  
( " F`Y`U`X`U`b`X`W`c`a`d`f`Y`\\`Y`b`X`a`U`c`f`d`\\]c`g`c`d`\\]W`U`h`Y`h`g`z`\\]g`h`c`f]W`U`U`b`X`W`c`b`h`Y`a`d`c`f`U`f`m`z`Y`I`Ua`]b]b[ `d`Y`f`g`c`b`U`U`b`X`W`c`"Y`W`h]j`Y`a`c`f`U`c`V`][`U`h]c`b`g`"  
) " K`f]h`Y`W`Y`U`f`U`b`X`W`c`[ `Y`b`h`U`b`U`mg`Y`g`c`Z`j`U`f]c`i`g`]ggi`Y`g`]b`a`c`f`U`d`\\]c`g`c`d`\\m`"

HYUW]b[ `GhfUH[ ]Yg`

# 5ggYgga Ybh

## 5ggYgga YbhHUg\_g`

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!WUgg`hYgh	%\$i	&- # \$- #& \$& \$' \$- . \$ \$ ' 5A	%ž&ž)
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## 5ggYgga Ybh8YHU]`g

### 5ggYgga Ybh% : ]bU`YggUm

GHUfhXUHŸ. Bch5dd`WUV`Y

8YHU]`g.

Gh XYbhŸ'k f]h`U`&ž) \$\$'k cfX`YggUm`Gh XYbhŸ'k ]`fYW]j Y ]bX]j ]Xi U`Ÿa a YbhŸ`H\ ]g`]g`hY`Z]bU`  
UggYgga YbhZ:f`UHŸbXUbWŸ`di fdcgYg"

Hi fb]hb`gYH]b[ . H\ ]g`Ugg][ ba Ybh]g`gi Va ]hX`hfc [ \ `Hi fb]hb`UbX`gh XYbhŸ`WU`gYY`Hi fb]hb`ga ]Uf]m  
fYdcfŸ"

### 5ggYgga Ybh&. !WUgg`hYgh

GHUfhXUHŸ. Bch5dd`WUV`Y

8YHU]`g.

Gh XYbhŸ`Ÿa d`Yh`U`hYghk ]h`g`cfhUbŸk Yf`ei Ygh]cbgž`Yei ]j U`YbhŸc`WU`") \$\$'k cfXg`]b`hŸU`" Gh XYbhŸ'k ]`  
fYW]j Y`U`a Uf`\_`UbX`ZYXVUW`\_j ]U`]b`WUgg`X]gW`gg]cb`".....

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

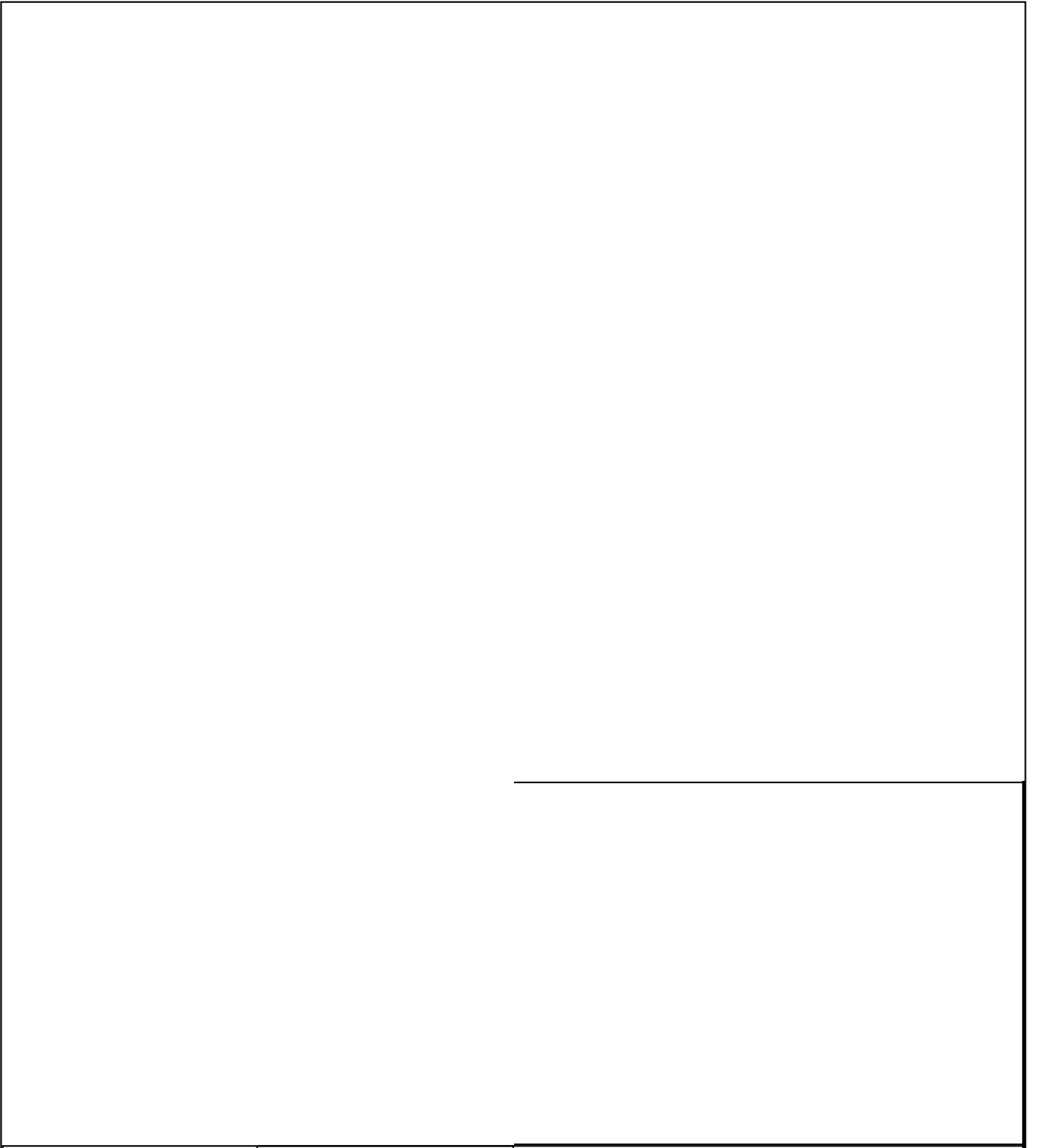
### 5ggYgga Ybh' . 9ggUm

GHUfhXUHŸ. Bch5dd`WUV`Y

8YHU]`g.

Gh XYbhŸ'k f]h`U`%ž) \$\$'k cfX`YggUm`Gh XYbhŸ'k ]`fYW]j Y ]bX]j ]Xi U`Ÿa a YbhŸ"

Hi fb]hb`gYH]b[ . H\ ]g`Ugg][ ba Ybh]g`gi Va ]hX`hfc [ \ `Hi fb]hb`UbX`gh XYbhŸ`WU`gYY`Hi fb]hb`ga ]Uf]m  
fYdcfŸ"



K YY_ ; . '&Bcj Ya VYf! '* Bcj Ya VYf	@YWh fy	K YY_ ; ! ; `cVU`Dcj YfMm`5`X]gW gg]cb`cZhY Yh]WU`]ggi Yg`gi ffcI bX]b[ `[ `cVU`dcj Yfmž ]bW` X]b[ `hY`cV][ U]cbg`hUhk Y`YUW` \Uj Y`hc fYgdcX`hc`gi V`W]gYg`Vm[ ]j ]b[ `U]X"
K YY_ '- . '- Bcj Ya VYf! % `Bcj Ya VYf	@YWh fy	K YY_ '- ! `K Uf`UbX`Hc`fh fy. `5`Vf]YZX]gW gg]cb`cZ hY`Yh]W]cZk Ufz`Zc`ck YX`VmUb`]b!XYdh W`bg]XYfU]cb`cZk \Yb`! ]ZYj Yf! `hc`fh fy`WUb`VY a cfU`m↑ gh]ZYX"
K YY_`%\$.`%*`Bcj Ya VYf! &\$`Bcj Ya VYf	@YWh fy	K YY_`%\$`!`H\Y`9h]WU`HfYUha Ybh`cZ5`b]a U`g. `5 W`bg]XYfU]cb`cZk \Uh!`]ZUbm!`]bhYfYgh`bcb!\i a Ub Ub]a U`g`a ][ \h\Uj Yz`UbX`k \Uhfc`Y`hYgY`]bhYfYgh

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

BchiUj U]UV`Y

F YWca a YbXYX`F Ygci fWg

H\Y`GHUbZcFX`9bWmWcdYX]U`cZD\]`cgcd\m`[\hdg.#d`Uhc"ghUbZcFX"YXi`#](#)

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

: YYXVUW\_.

Gh XYbhg`k ]`VY`dfcj ]XYX`k ]h`U`a Uf`\_`Zcf`hY` ]b!WUgg`h`gh`E`i`Ygh]cbg`k ]`VY`g\cfhUbgk Yf`UbX` ]b`WUgg  
ZYXVUW\_`k ]`VY` [ ]j`Yb`"Gh XYbhg`k ]`fYW]j`Y` ]bX]j` ]Xi`U`Wca`a`Ybhg`UbX`U` [ fUXY`Zcf`hY`YggUmWca`dcbYbhg  
cZ`hY`Wci`fgY`"H\Y` [ fUXY`k ]`VY`Wcbg]gh`bhk ]h`h`Y`YggUmifi`Vf]Wdfcj ]XYX` ]b`h`g`XcW`a`Ybh`

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]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`f1`\*)`XUmg`U`mY`Uf2`≠mci`  
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiXi`Y`hc`U`Zi`h`k`]H`Hi`fb]h]b`mci`a`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`YbHgE`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`UH]WU`mifYW]j`Y`U`h]W`Yhbi`a`VYfz`Vi`h]Zmci`HY`Yd\cbY`mci`k`]`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`ig`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`b`]bg]h]UbVW`g`k`\YfY`H`g`]g`bchidcgg]V`Yz`]hk`]`VY`ghUH`X`cb`mci`f`Wci`fgY`g`A`ccX`Y`g]H`k`]H`  
U`HYfbUH]`Y`gi`Va`]gg]cb`XYHU]g`"

:`cf]bZcfa`UH]cb`cb`\ck`hc`gi`Va`]hUgg][`ba`Ybhi`cb]bY`j`]U`A`ccX`Y`.\`hdg`#gh`XYbhi`bgk`"YXi`"Ui`Ack`!  
gi`Va`]hUgg][`ba`Ybhi`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'5WWhUv'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
- `cWWh'gYfj ]W'g'UbX' ]bZcfa Uhcb'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 ""

[\hd. #gj V'YWf i \]XYg" \]VfUfm'i bgk "YXi "Ui #` \]gY#JVci h' \]gY](#)

