

IEST5001

: fUa Yk cf_g`cZ9bj]fcba YbHJ``F Y`Uh]cbg'/ `@YUXYfg\]d

7 ci fgY⁻Cj Yfj]Yk

GHJZZ7cbHJWh78YHJ]`g

7cbj Ybcfg

BUa Y	9a U]`	5j U]`UV]`]m	@cWUh]cb	D∖cbY
HYa U'A]`ghY]b		Xi f]b['Wcbgi `HJh]cb	A cfj Yb 6fck b 6i]`X]b[" A 6'*(

@Y₩ni fYfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cWUhjcb	D∖cbY
>c∖b`7Uff	ĉ∖b"₩Uff4 i bgk "YXi "Ui	6mUddc]bhaYbh Xif]b['Webgi`HJh]eb \cifg fKYXbYgXUmgž% d"a"'!&d"a"'E':≢o dYfgeb`ef`eb`]bY"	A cfj Yb 6fck b 6i]`X]b[" A 6' *'	

GWXcc``7cbHJWhi=bZcfaUh]cb

GWXcc``cZ<iaUb]hJYg'UbX'@Ub[iU[Yg

@cWUhjcb. `GW&cc``C ZJWYžA 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>\U`4_i bgk "YXi "Ui</u>

7ci fgY[·]8YHJ]`g

7 fYX]hDc]bhg***

Gi a a UfmcZhXY7ci fgY

H\]gʻWci fgYʻdfcj]XYgʻUbʻ]bHcXi Wijcbʻhcʻh\YʻWca dʻYl ʻUbXʻHfUbgX]gWijd`]bUfmbUhi fYʻcZYbj]fcba YbHUbX gcWjYmi]ggi YgʻUbXʻh\Yʻ]b\YfYbhVYbY]hgʻUbXʻWkU``Yb[Ygʻ]bʻa i `hjX]gWijd`]bUfmUddfcUWkYgʻhcʻYbj]fcba YbHU` `YUXYfg\]d"`H\YʻYa d\Ug]gʻ]gʻcbʻYl d`cf]b[`WcbWYdhi U``UbX`dfUWfjWU``ZfUa Yk cf_gʻh\Uhi]bZcfa ``cWU``UbX [`cVU``UddfcUWkYgʻhcʻYbj]fcba YbHU``a YUb]b[gžfY`UhjcbgžXYWjg]cbgžUbX`UWfjcbg"`5`_Yma YggU[Y`]gʻh\Uh h\Y`ZfUa Yk cf_gʻZcfYbj]fcba YbHU``YUXYfg\]d`UfY`bchgHUhjWVi hWcbhjbi U``mYj c`j]b[ž'k]h\`h\Y`dUWY`cZ WkUb[Y'dUfhjWi`Uf`mfUd]X`UhidfYgYbh'

7cifgY`@YUfb]b[`CihWcaYg

- % 8]gW ggʻh\Y`W\Ub[]b[`gHUHY`cZh\Y`Ybj]fcba YbhUbX`dYfgdYW]j Ygʻcb`W`ffYbhi_YmYbj]fcba YbHU`]ggi YgʻUgʻ]bZi YbhJU`ZUWcfg`]b`ZtUa Yk cf_g`[cjYfb]b[`Ybj]fcba YbHU``YUXYfg\]d
- &" 8 Ya cbgffUhY Ub'i bXYfgHUbX]b['cZd'UVY!VUgYX UbX']bhYfbUh]cbU``dYfgdYVMjj Yg`fY`Yj Ubhhc Ybj]fcba YbHU``YUXYfg\]džUbX`fYVc[b]gY UbX'UbU`mgY'h\Y`fY`Yj UbVY cZgcW]U``gmghYa g`cZdck Yf UbX'W `hi fU``gmghYa g`cZ_bck `YX[Y
- '" I gY`W]h]WU``UbX`WYUh]jY`gmbh\Yg]g`hc`f][cfcig`mYjU`iUhY`Ybj]fcbaYbhU``]ggiYg`UbX`Ufh]W``UhY Uddfcdf]UhY`fYZYI]jY``YUXYfg\]d`dfUW]WYg`hc`UXXfYgg`fYU`!kcf`X`bYk`cf`Wcad`YI`dfcV`Yag
- ("7 ca a i b]\WHY`Wca d`YI`]XYUg`]b`U`j Uf]YhmcZZcfa Uhg`hc`X]j YfgY`Ui X]YbWYgžUbX`XYa cbgHfUhY`Ub i bXYfgHUbX]b[`cZfYZYI]j Y`UbX`fYgdcbg]V`Y`dfUWf]WYg`cZWc``UVcfUh]j Y`↑ghYbj]fcba YbhUbX`gc\JYhm `YUXYfg\]d
-) " =XYbhJZmVUff]Yfg`hc`UbX`cddcfhi b]hJYg`Zcf`gi ghU]bUV]`]hmUbX`fYghcfUhJj Y`fY`UhJcbg`fY`UhYX`hc`U`VfcUX fUb[Y`cZgcWJU`žW`hi fU`žYhk.]WJ`ž'UbX`YWcbca]WZJWfcfg

HYUWX]b[GhfUhY[]Yg

H\]gʻWcifgYʻU]agʻdfcj]XYgʻUbʻUffUmcZZFUaYkcf_gʻh\UhigdYV]Zm_Ym`YbgYgʻh\fci[\`k\]W\`hc`j]Yk Ybj]fcbaYbhUbX`gcW]YhmdfcV`YagʻUbX`dchYbh]U`]h]Ygždfcj]X]b[`mci`k]h`U`WcbWYdh`U``hcc`_]hZcf`mcif ZihifYgʻghiX]Ygʻ]bʻh\Y`dfc[fUa`UbX`]b`mcif`ZihifY`kcf_"`Hc`UW\]YjY`h\]gžh\]gʻWcifgY`ih]`]gYgʻ]bhYfUW]jY `YWfifYgž]b!WUgg`UbX`cihcZWUgg`UW]j]h]YgžX]gW gg]cbžcb`]bY`Yb[U[YaYbhžUbX`Z]Y`X`ghiX]Yg`hc`YId`cfY WcbWYdh`U``UbX`dfUW]WU``ZfUaYkcf_g`Zcf``YUXYfg\]d`]b'Ybj]fcbaYbhUbX`gcW]Ym"

5ggYgga Ybh

5ggYgga YbhHUg_g

5ggYgga YbhˈtJg_	K Y][\h	8iY`8UHY	GhiXYbhi@YUfb]b[CihWcaYgʻ5ggYggYX
K YY_`mF YUX]b[5ggYgga Ybh	(\$1	Bch5dd`]WUV`Y	%ž' ž(
; fcid`DfYgYbHUh]cb`	&\$I	Bch5dd`]WUV`Y	%ž`&ž`' Ž`(Ž`)
:]Y`X`DfcYWi	(\$1		

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

: cf`a cfY`XYHJ]`gž`d`YUgY`fYZYf`hc`h\Y`"5ggYgga Ybhi±oghfi Wijcbg"`XcW a YbhidcghYX`cb`h\Y`Wci fgY`A ccX`Y g]hY"

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

5ggYgga Ybh' ::]Y`X`Dfc'YWh

GhUfh'XUhY. Bch'5dd`]WUV`Y

8YHJ]`g.

:]Y`X`ghi XmcZU`gY`ZgY`YWhYX`g]hY`k]h\`[i]XUbWY`Zfca`]bghfi Whcf"`Hi fbYX`]b`k cf_`]bWi XYg`Z]Y`X`bchYgž Ubgk Yfg`hc`Z]Y`X`ei Ygh]cb`[i]XYž'UbX`UbU`mg]g`cZg]hY`h\fci[\`h\Y``YbgYg`cZfY`Yj UbhWci fgY`ZfUa Yk cf_g" &\$\$\$`k cfXg`]b`hchU`"

+b!dfcW/gg`k cf_g\cdd]b["`:]bU``ZYYXVUW_`dfcj]XYX`UWVcfX]b[`hc`U`fi Vf]W

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

: cf`a cfY`XYHJ]`gžd`YUgY`fYZYf`hc`h\Y`"5ggYgga Ybhi≢oghfi Wi]cbg"`XcW a YbhidcghYX`cb`h\Y`Wci fgY`A ccX`Y g]hY"

Hi fb]h]b'gYh]b[.`H\]g'Ugg][ba Ybh]g'gi Va]hYX'h\fci [\`Hi fb]h]b'UbX'ghi XYbhg'Xc'bchgYY'Hi fb]h]b g]a]`Uf]hmifYdcfhg"

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I	I	

7 ci fgY GWX YXi `Y

Ghi XYbhgʻUfYʻghfcb[`mYbWci fU[YX'hcʻUhhYbX'U```WUggYgʻUbX'fYj]Yk ``YWhi fYʻfYWcfX]b[g"

5HYbXUbWYFYei]fYaYbhg

|--|

FYgci fWg

DfYgWf]VYX F Ygci fWfg

Mci f'_YmfYUX]b[g'UbX'ch\Yf'a UhYf]U'g'k]``VY'Uj U]`UV'Y'j]U'mci f'A ccX`Y'g]hY"

FYWca a YbXYX FYgci fWYg

Mci 'UfY'YI dYWYX'hc'a U_Y`[ccX'i gY'cZh\Y'fYUX]b[g'dfcj]XYX'Zcf'h\Y'Wci fgYž'UbX'hc'fYUX'VYmcbX'h\cgY a UhYf]U`g'Zcf'mci f'Ugg][ba Ybhg"'⊕XYdYbXYbhfYgYUfW\']g'YI dYWYX"

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

DUghYI dYf]YbWY UbX`ghi XYbhZYYXVUW_`cb`h\Y`I_BGK_`cb`]bY`gi fj Ym'cc``a_m9I dYf]YbWY`]bX]WUhYg`h\Y]a_dcffUbWY`cZghi XYbhg`Xc]b[_'WcgY`UbX`WUfYZ ``fYUX]b[_`cZh\Y`k YY_`mUgg][_bYX`fYUX]b[_gz`cZYb[_U[_YX ghi XYbhdUfh]W]dUh]cb`]b`WUgg`X]gW gg]cbgz`UbX`cZghi XYbh]bXYdYbXYbhfYgYUfW\"

Gi Va]gg]cb[·]cZ[·]5ggYgga YbhHUg_g

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

, Zmci `YbWci bHYf`U`dfcV`Ya `k \Yb`UHHYa dH]b[`hc`gi Va]himci f`Ugg][ba YbhH\fci [\`Hi fb]H]bž`d`YUgY HY`Yd\cbY`91 HYfbU``Gi ddcfhcb`-',)`''' %cf`Ya U]``H\Ya `cb`YI HYfbU`HY`Hgi ddcfh4 i bgk "YXi "Ui `"`Gi ddcfh

5WUXYa]W<cbYghmUbX D`U[]Uf]ga

D`U[]Uf]ga `]g`i g]b[`h\Y`k cfXg`cf`]XYUg`cZch\Yfg`UbX`dfYgYbh]b[`h\Ya `Ug`mci f`ck b"`=h`WUb`hU_Y`a Ubm Zcfa gžZfca `XY`]VYfUhY`W\YUh]b[`hc`UVW]XYbhU``mWcdm]b[`Zfca `U`gci fWY`k]h\ci hUW_bck `YX[Ya Ybh'

- i bXYfgHJbX'mci f`f][\hg`UbX'fYgdcbg]V]`]h]Yg`Ug`U`ghi XYbh'Uh'I BGK
- VY Uk UfY cZdU[]Uf]ga žWcdmf][\lbzi BGK Ghi XYbh7 cXY cZ7 cbXi Wh0bX 5WW/dhUVY I gY cZ I BGK '=7 H'F Ygci fW/g'Dc']Wh
- VY Uk UfY cZh Y gHUbXUfXg cZVY Uj]ci f YI dYWYX cZYj YfmcbY]b h Y I BGK Wca a i b]m
- `cWUHY`gYfj]WYg`UbX`]bZcfa UH]cb`UVci hI 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 bXYfgHJbX]b[`cZU``'h\Y fY`UhYX'UgdYWfg'cZ9@=G9'k]``\Y`d'mci 'a U_Y'h\Y'a cghcZmci f`ghi X]Yg'Uh'I BGK "' <u>\hhd.#gi VYWf[i]XYg'`]VfUfm'i bgk "YXi "Ui #Y`]qY#UVci hY`]qY</u>

5₩UXYa]W≠bZcfaUh]cb

: cf^{*}YggYbhJU^{**}gh XYbh^{*}]bZcfa UhJcb^{*}fY^{*}UhJb[^{**}hc.

- fYei YghgʻZcf`Yl hYbg]cb/
- `UHY 'gi Va]gg]cbg '[i]XY `]bYg/
- fYj]Yk cZa Uf_g/
- I BGK '<YU`h\`UbX'GUZYImidc`]WJYg/
- YI Ua]bUh]cb'dfcWYXi fYg/
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