

M"

! "#"\$%

IA,6"12,"-,&6H3"12,"V@@"2&H"+,,%"&'1,6,("&%(",gT&%(,("+-"4\$%L6,HH"&%("12,"Cg,9510A,"V6&%92"0%"A&60\$5H"K&-H\*"a%"=EEP3"12,"@/,609&%"#,9\$A,6-"7"#,0%A,H1/,%1"@91"Y@##@Z3"<5+'09";&K"!!N?"Y=EEPZ3"H,1"S\$612"%,K"&%("(0SS,6,%1"V@@"T6\$A0H0\$%H"&SS,910%L"9\$%H165910\$%"T6\$d,91H"S5%(,("+-"12,"@##@"+,-\$%("(06,91"S,(,6&'"9\$%16&91H\*"F\$6,"6,9,%1'-3"12,"V@@"T,69,%1&L,"\$S"6,G506,("9\$/T\$%,%1H"S\$6"(\$/,H109"9\$%H165910\$%"/&1,60&'"2&H"0%96,&H,("S6\$/"?Ej"0%"],9,/+,6"=E=E"1\$"cEj",SS,910A," I91\$+,6"=E==3" K012"&%"5T9\$/0%L"0%96,&H,"1\$"D?j"T,69,%1"S\$6"01,/H"(,'0A,6,("H1&610%L"0%"9&',%(&6"-,&6"=E=P\*"1"''"Q@#"K"=?\*EEM\*""

## ((E B2@&; 3\$%(8''"

 $V5-"@/,609\&"6,G506,H"12\&1"12,"\_H1,,'3"06$\%3"\&\%("/\&\%5S\&9156,("L$$(H"5H,("0%"12,"T6$d,91"\&6,"T6$(59,("0\"12,"W\01,(".1&1,H\^e"I'''')>P"W\*.\^4\"K"?M=M\"J20H"0\%9'5(,H"/\&\%5S\&91560\%L"T6$9,HH,H3"H592"&H"/,'10\%L3"9&H10\%L3"S\$6/0\%L3"S0\%0H20\%L3"&\%("9$&10\%L\^"@"/&\%5S&9156,("L\$$("0H"9\$\H0)(,6,("T6\$(59,("0\"12,"W\01,(".1&1,H\"0SU"Y!Z"\&''"\$S"12,""$ 

c"

! "#"\$%& ' ()\*+%

```
?52" &1" DEP!!Y?Z"Y, / T2&H0H" &((, (Z*" J2,"0%1,%1" 12,%"0H" 12&1" V@V@' K0''" %$1" $%'-", gT&%(" 12," 9$A,6&L," $$" ($ / ,Hi09" T6,$,6,%9,H" 1$" / $6," T$1,%10&'" 6,90T0,%1H" Y,g1,%(0%L"1$"L6&%1"&%("$5%(0%L"6,90T0,%1H"H592"&H"H1&1,H"&%("'$9&'010,HZ"&%(" / $6," T6$d,91H"Y&''"0%$6&H1659156,Z"+51"&'H$"1$"9$A,6" / $6,"9$%H165910$%" / &1,60&'H*""
```

 $\label{eq:J2} J2, "V@V@"T6\$A0(,H"T6\$20+01H"S,(,6\&'"S5\%(0\%L"\$\%"0\%S6\&H1659156,"T6\$d,91H"S\%',HH"\&''"/\&1,60\&'"5H,("0H"(\$/,H109\&''-"T6\$(59,(U"")41,60\&''5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,("0H"(\$/,H109\&''-"T6\$(59,(U")41,60\&'')5H,(U")41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60\&''-"T6\$(59,(U'')41,60),(U'')41,60\&''-"T6\$(59,(U'')41,60),(U'')41,60\&''-"T6$ 

 $<5+*"; *"B\$*"!!DN?h3"kDEP!>*"B\$1\&+'-3"12, "V@V@"\&TT'0, H"1\$"+00"\$, (,6\&'"$0%\&\%90\&'"\&HH0H1\&\%9, "S\$6"0%$6\&H1659156, 3"%\$1"d5H1"aa\@"$5%(0%L3"5%', HH"12, "T6$d,91"$6"12, "/&1,60&'"0H"9\$A,6,("+-"&"K&0A,6*"J20H"0%9'5(,H"(06,91"T5692&H,H"+-"12,"$,(,6&'"L$A,6%/,%1"+51"&'H$"&''"S$6/H"$S"$,(,6&'"S0%&%90&'"&HH0H1&%9,*"@((010$%&''-3"V@V@`H"(,S0%010$%"$S"4#C/+8$/%&$%/''"0H"+6$&("&%(",%9$/T&HH,H"&'/$H1"&%-"+50'1"H1659156,"$6"S&90'01-U""$ 

 $aBQ\# @. J\#W4JW\#C^* q J2,"1,6/"rr0\%S6\&H1659156,``"0\%9'5(,H3"&1"\&"/0\%0/5/3"12,"H1659156,H3"S&90'010,H3"&\%(",G50T/,%1"S$63"0%"12,"W%01,(".1&1,H q "$ 

- "" Y@Z"6\$&(H3"20L2K&-H3"&%("+60(L,H["
- "" YVZ"T5+'09"16&%HT\$61&10\$%["
- "" Y4Z"(&/H3"T\$61H3"2&6+\$6H3"&%("\$12,6"/&6010/,"S&90'010,H["
- "" Y 1 Z"0%1,6901 "T&HH, %L,6"&% ( "S6,0L21"6&0'6\$& ( H["
- "" YCZ"S6,0L21"&%("0%1,6/\$(&'"S&90'010,H["
- """ YQZ"&06T\$61H["
- "" Y) Z"K&1,6"H-H1, / H3"0%9'5(0%L"(60%:0%L"K&1,6"&%("K&H1,K&1,6" H-H1, / Hf"
- "" Y 8 Z", ', 91609&'"16&%H / 0HH0\$%"S&90'010, H"&% ("H-H1, / H["
- """ YaZ""510'010,H["
- """ Y\Z""+6\$&(+&%("0%\$6&H1659156,["&%("
- "" YXZ"+50'(0%LH"&%("6,&'"T6\$T,61-\*""

<5+\*"; \*"B\$\*"m / TT2|Tf[(/)0.2(&)0.2(1)0.2(,)9(T101111 j E+\*")-81.9(;)0.2(917,)9(3V)0.T57"56

 $W\% (\ ,6"12\ ,"a\#@3"Q8\ b\ @"K0''" (0H160+51\ ,"f="+0''0\$\%"\$A\ ,6"12\ ,"\%\ ,g1"1\ ,\%"-\ ,\&6H"1\$"6,0\ /\ +56H\ ,"0\%96\ ,\ /\ ,\%1\&'"0\%96\ ,\&H\ ,("9\$H1H"\$6"T6\$A0 (\ ,"\&"=j"0\%9\ ,\%10A\ ,"1\$"6\ ,90T0\ ,\%1H"\$86"T6\$d\ ,91H"5H0\%L"9\$\%H165910\$\%"/\&1\ ,60\&'H"K012"H5+H1&\%10\&''-"'\$K\ ,6"\ ,\ /\ +\$(0\ ,("L6\ ,\ ,\%2\$5H\ ,"L\&H"Y\ )8\ )Z"\ ,\ /\ 0HH0\$\%H"Y_'$KN9\&6+$\%e"9$\%H165910$\%"/&1\ ,60\&'HZ*"$I'''''$ 

 $.,9\$\%(3"12,"aa\@"\&((H"\%,K"T6\$L6\&/H"1\$",g0H10\%L"]V\#@H"\$6"5\%(,6"12,"5/+6,''&"\$S"\&\%",g0H10\%L"]V\#@3"\&'H\$"/\&:0\%L"12,"\%5/+,6"\$S"T6\$L6\&/H3"\&\%("T6\$d,91H3"L6,&1,6*"JK\$"H592"T6\$L6&/H"&6,"12,"%,K"V60(L,"a%A,H1/,%1"T6\$L6&/"Yf!="+0''0$%Z"&%("12,"%,K"@06T\$61"J,6/0%&'"a/T6\$A,/,%1"T6\$L6&/"Yf?"+0''0$%Z*"V$12"T6\$L6&/H"&6,"+,0%L"T'&9,("5\%(,6"12,"5/+6,''&"$$"&%",g0H10%L"]V#@"&%("12,6,$$6,"T6$d,91H"$5%(,("+-"12,H,"T6\$L6&/H"K0'''&'H$"6,G506,"9$%16&91$6H"1$"9$/T'-"K012"]V@*"""$ 

 $J206(3"12,"aa\@"0\%9'5(,H"$ 

&( / 0%0H1,60%L"12,H,"T6\$L6& / H" / &-"9\$%H0(,6"12,"T&- / ,%1"\$\$"T6,A&0'0%L"K&L,H"&H"&" T\$H010A,"\$&91\$6"0%"\$5%("&''\$9&10\$%"\$\$6"+6\$&(+&%("&HH0H1&%9,"T6\$L6& / H\*""""

 $76336. \& > \$.4 \& 0 \$ 8633 \$./") (6.4 \& F \$ 6, "T 6 \& d, 91 \& F' K 0'" 2 \& A, "] V@"6, G 5 0 6, / , \% 1 \& F' K 12 \& 1" 12, "aa \@"2 \& H"T \& H H, (*" 4 $ \% 16 \& 91 \$ 6 \& H" 5 + 9 \$ \% 16 \& 91 \$ 6 \& H" K 2 \$"T' \& \%"1 \& F' K \$ 6 : " \$ \%" T 6 \& d, 91 \& F' S \% (, (", A, %"T \& 6 10 \& '' - " + - "12, "aa \@" / 5 \ H 1", & 6 \% " & + $ 5 1" 12, "6, G 5 0 6, / , \% 1 \& F' S & 12, "] V @" & \% (" H, , : "1 \& F', \% 15 6, "9 \& F' T' 0 \& 9 , "K 2, 12, 6" 6, G 5 0 6, (" + - "12, "' \$ 9 \& '3" H 1 \& 1, 3" \$ 6" S, (, 6 \& '' L \$ A, 6 \% / , \% 1 & F' 4 \$ \% 16 \& 91 \$ 6 H" \% 1" S \& / 0' 0 \& 6 K 0 12" 9, 610 S 0, ("T \& -6 \& F' H" \& \% ("12, "9' \& H H 0 S 0 9 \& 10 \$ \%" 6, G 5 0 6, / , \% 1 H" $ S " 12, "] V @" T 6 \$ A 0 H 0 \$ H "$ 

\$6"H5+9\$%16&91\$6"K2\$", / T'\$-H"\$\$56"\$6" / \$6,"0% (0A0 (5&'H"&1"12,"T6\$d,91" / 5H1", / T'\$-"\$%," \$6" / \$6," G5&'0\$0, (" &TT6,%109,H\*" I"'" 452) a%&(A,61,%1" %\$%9\$ / T'0&%9," K012" &TT6,%109,H20T"6,G506, / ,%1H" / &-"+,",g95H, ("0\$"&"T,%&'1-"\$\$"f?E"T,6"2\$56"\$\$" / 0HH0%L" &TT6,%109,H20T"2\$56H"0H"T&0(\*"@"\_) \$\$("Q&012"C\$\$\$61e",g9,T10\$%"&'H\$",g0H1H"K2,6,"&"9\$%16&91\$6" 6,G5,H1,(" G5&'0\$0,(" &TT6,%109,H" \$6\$ / " &" 6,L0H1,6,(" &TT6,%109,H20T" T6\$L6& / "&%("12,"6,G5,H1"K&H"(,%0,("