GROWING LIFE ON MARS

STONNING FICTION: HARLAN ELLIS RETURNS SOLYMPIC SCIE SPAIN CREATES THE FUTURE





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DEPARTMENTS

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Transportation By Kathioun McAulifle Arplane wings that move

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A Chiefe



DEDICATED TO THE MEMORY OF GERARD O'NEILL 1927-1992

WE SEE FARTHER INTO THE FUTURE BECAUSE WE STAND UPON HIS SHOULDERS.'

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By Harton Ellison

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Menroe n JFK's assassmation, and puts a

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By Paul Bagne Physicial Christopher MoKay wonto to use the greenhouse effect to make Mars more habitable

Anti-Matter

FIRST WORD

ART AND THE MAD MACHINE: The spirit of addiction vs. the spirit of life

By Lawrence Russ

In the ats tak together, an error of dejection and doorn soon creeps in the the fog, on leopard a pawe

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> erts, but our failure to use their gosure power for the take of our rem manifold future

Containly, we make far too title use of the proven economic and ocucational powers of the arts Burl, ironcafy, the reference contensa-

> Rass, a poel and attensory, has guildishud in numerouus liberary journaist, indi a successified campainty library ambats' rithints hegatabace, send shared the Cosmoclosul Bar Association's Crewindto e on Arts and the Law.

twos who attack arts funding as a whole out of supposed fear for our moral lucuse, come closer to the heart of the motion They stand in the right location—but they as heart to the landscare

In turb, the ansise one of our few generie sources of most Haning. We should make zoora uso in our schools of works like the beside of the Brohens Chrymn and the films of Chaplen, which turn composition and insert insignation into tweet expension

But the central modify of the ans, ther most ortheal importance for our statum as well as the difdent or hostile treatment we so ofthe diff than ownt leaders or ear depart than ownt leaders or ear pickny "modif" before manney. the astil entenade of being which is radicably different from the one that respire to a secret.

The grait American philosopher William James wrote, the more Nachmas born of the exclaims excited by other biothgodiese SUCCESS Theil-with the squalid cisish incorporation put on that word success—is our rolected diverse.

That is the great where this service are not motion and generates to much sortex real of motion and generative services and display people test and approximate of provides and approximate of provides and approximate of provides and approximate their too needs. Are a yea perait to their too segme of age their too needs. Are a yea perait of the their diseases and there boewoon noise free mereinance and their approximate too too and the too the period of the too t cravings still more And so the country spins downward in that widening, addictive spiral.

But the arts throw this wooden shoas not he gens of this thferrar machinery. They truck not on suparison average the shoal shoal wood certened or spurts of spontenness and wonder mplatery and low, transformation and growth. The next benefacience allow most common most sub-terminet most common, most sub-terminet most of the shoal of the submetro. Groot on thes plaque and shoat revealed of compettion but.

It is have that the and that subversionness and their greenest importances for our fusion and lound. And is a bear implied officism of our self-decimation ways, their comparing body of walass that makes the poddlers of workly weeth and sweys accordfusion of the arts.

The Sperich Relengest must have tell the "subversive" power of the atte when in 1966, they more deter the poor Informs Cassing Lines and dumped his obspan in to an unmarked gave Though Lines were not a persise in the CAt Wei, the faces the share of learned the speni of compension, counting undy up in levels. Name and performance in the contrained performance in the share performance in the speni of compension of the speni of

These killing in their tyrathyr sensed what we in our freedom should snow end heed is beforthet our future is not sueed or too primarily in physicial, economic, or bolenitie combats, but ather in the wes behaviori this spint of saffurt desire and that comb of a the form—our great works of and the

READERS' WRITES

Breathing easier, remembering Goethe, and continuing the debate over women, sex, and BU 486

Look Whe's Talking

After reaction Torn Decretzions column able to land anything remotely related with their brock," While Larn uppare of obid summally account too life perfectas in Westerman DC, three are 1.257 neth potent pda Lipika (%) 480, face measures are currently available, com-

Tom Dworetzky's suggestion that men analysis of occupations before March in an can by olying up a sense of moreity. The flames of this debare seen to be men and women cannot deal with reappraising we must therefore give sponalory we must metaboli give

Lesia O'Corror's article (Continuer Load And 1992 rates the board baherd I was summed though that she ementer Johnson Westernen und to a Rielong stuck of biology and of the perimasal theory of necturality This spirit of wonder must certainly

Your February 1992 used had an arth the peak suffering with a low dipole

Albumannin NM

The Despace Must Be Laughing

Econora anoscol Mesa from Bohart specific and a second second Dation in fun world needs more of his preverence

19311 Due to an merebelment te

Sin Francisco Cá DO

SPACE

ROCKETS KEEP FALLING ON MY HEAD: Russian citizens tell their space agency to pick up its garbage

By James Oberg

The entrusiant of the pool is of the forms flower busin new the Contractweath of independent States, for ded out leng again. In the place that a place conjunction to contract, again in the place the spring up containing and open futured ingeniter of an open synthesis and a place of the synthesis tracters. Inclusion among the place tracters in the synthesis and the synthesis and the synthesis tracters in the synthesis and the synthesis and the synthesis tracters in the synthesis and the synthesis and the synthesis tracters in the synthesis and the synthesis and the synthesis and the synthesis tracters in the synthesis and the synthesis and the synthesis and the synthesis tracters in the synthesis and the synthesynt

Before reaching onto: a spaceonth anked 88 percent of the seweight Most is in the form of burned flat, where it despition on the armosphere. But some of the weight censule is despitial order of stages that planmet boot to Earth. Weither expections before areasy busiter their most consol and the about the respect consol at of Hussian specarotic be obspit the subset. The respect consol at the busiter the respect consol at the busiter. The respect consol at the subset. The respect consol respectively and the subset of the respectively.

In the past, the training notices alonge potential accurate forms bebilling potential accuracy forces logist the occupants don'te fluct aborty below the Soviet (them collapsed) the total wave of geternois, combined with reserget manonalism, embodiesed the population to protect vegotustus total of a patiental automotion.

Early in 1980 assistered if Kazahrsan legan demonstrating agenetit the fail of robust obbre inorith the national demonstrating or reacted with a trademont and to Send a general contract of the one the local Kal Commen Tios, which in 1981 became the second more the local Kal Commen Tios, which in 1981 became the second more the local Kal Commen Tios, which is a second by the any relclarity where the second second by the last of anneal 1,000 complete or wethous tables ratiosed in the their land and demanded the goverriment get nd of them.

Hadoplar order form baldbar unofficial part of the term baldbar provide any control residues and any september of the program any september of the solution of the of the solution with estimates of the solution of the solutio

Triov promised to stop the detolerate blacking of assigns and to at least gather colors into price. Recto Moscow announced in March 1960 that respects would olear up the steppes by August.

Encouraged by the success of the Scatzhener proteins inhibit tens of the impact zero downrange of the military appose obtain target of the military appose obtain begin that own public proteins in the Nemet region neer the Arttic Coese, people expression course down the term coursed to mandeer herets be refress of and usuar the damps of outpany creates the tanget of category operations to region created by high penetation target parts.

The new ecological finiang elened official presmale: As of the spring, Plasatsk cosmochome spokesman V Spinicknov fold the ratemail newspaper Sowetkeyer Assays, "detailed ecological work will be camed out after each launch."

But by October, it was clear that the percenser were workless. Although mistary paraonnal had cleared 216 points, it represenadonts had nonattyless orinauston the allocated budget, so offcate halfer the clearup. The local populations strend to yet enother novel table. They had teamus in Kazaktezh the charmen of the local Drive locations of the local Drive locations of the local Drive become the cazakines broken both on meet the cazakines broken both anow, the combined Two gave to them West Stor? White the strend both the local inter both on the both of a both the both on the the strend both on the both on

Desperate to most uncel due quetas clearante developmente carter des encodes de la consuluira stantaria de la consuluira stantaria de la consultanta des accessos de la consultibilita de la consultación de la consultatibilita de la construcción de la consultación de la construcción de la consultación escla construcción de la consultación escla construcción de la consultación escla construcción de la construciente de la construcción de la concombina La consecuenti deterior.

Meanwhile downtrenge of Pearethi, the nerves an electroning even more reatless. The local government of the Uversky Pegien werted a folial han on any socio adelhitos over its sentery A Synet government gookerman, Yanny Sinolyakov, assured the ocumol that the specie program poses vitually no denger to the poses of the note in the social allouted here out of the meeters open com-

Depth pe fail of the Savet government, rocksta oprimue to soor into space from Balkonur and Plesetek. But for the friat time the customary freeworks and thunder suscularly of the oberrange works. What goes up has come ober-with a bala, 20



Busslan offizens are road as hell about the rocket debris bitering their fields and they're net going to take it anymere.

It's time to take the next step.

Exploration has always opened avenues of commerce for humarnty. In the future, these avenues will stretch from the highlands of the Moon, to the plains of Mars.

First, pathways are mapped, Then, outposts are established that are followed by a natural migration where settlements become the building blocks of an expanding economy. Our international neighbors understand this well. Today, more than a docan counties are investing in space exploration, fully aware of the future account developite.

America could lead the GENERAL DYNAMICS way again, if we act now. Save Streng Dynam



I'M READY FOR MY EXCAVATION, MR. DEMILLE: Archaeologists part the sands covering the Tein Commandments set

By J. K. Mountain

In rowels and which become the acchaece low the care, charing saint from around Exponen private They re-acceveling near the temple of Phanace Remois II. Manby at 21 five top lasting sprives.

Plaster sphinaes?

This is Causalation. Card contawhen a criterosolity have not begin to unrearth part of the aint lister. Caus II: A Oblivious 1903 or instruction of the causal of the causal international cardional cardional films in internation of the cardiod of the cardiod cardiod cardiod and the cardiod of the cardiod cardiod and the most of Egyptic locat too much. (Cervise 1996 and cardiod and the most of the topic cardiod cardiod and the cardiod cardiod cardiod and the cardiod of the Egyptic and depart and the cardiod of the Egyptic and depart and the cardiod of the Egyptic and depart at the cardiod of the Egyptic and department. In the Egyptic and department in the cardiod of the Egyptic and department in the cardiod of the chimele does not allocated the chimal cardiod of the Egyptic and department in the cardiod of the chimal of the card cardiod of the chimal cardiod of the chimal of the card cardiod of the chimal cardiod of the chimal of the card cardiod of the chimal cardiod of the chimal of the card cardiod of the chimal cardiod of the chimal of the card cardiod of the chimal cardiod o

The owners of the land had stapulated that the firmeware remove the set when they completed firming, but DeMile, way over butget, just had it demented and kill the peaks where they iny. Safe years are in 1963, Los

Birty years are in 1963, Lee Angelee firmersker Pekie Rechan stumbled on the buned 56% to cator, and in 1660, he began realing funds to explaie the also. He also recruited a team of protestional archaeologists led by John Hwise a Ph D candidation archaeology at the University of Calitaria Lee Angeles

The set unfortunately, hat benaam opposite approximately has benaam opposite approximately particle equinal. The same an envolving way equinal, more than three feel a system. Poncer same yield a result, parts of the DaMile sat are being uncovered by instruct proceedent "As sport as a press of the will recording the same state." Perform the sport of the total many and the same distribution proceed.

Although DeMile's records and historical photos indicite the locations of the mass passes. Ptripermits, but Platter asys it will begin this Summer. The initial \$150,000 will pay for only one small plase of the project mapping the site and unearthing a few pieces of statuery in method danger from the blowing sand.

We want to put a trist trench where we think the spharwae and, Parker says. "Current particle imit us to moving no more than titly outso words of saind."

b) and in the second second

Hollywood Heritage a nonprof I hatorical organization, will call also the streacts. Many will per-

> including the Smithsoman invaturion, on long-form loans

> While Parker style the project has received wich support at least one archaeologist has reportedly questored its "legitimacy" bocause the artifacts are less than a pentary old.

> > Esteemed on

neared to proport the burled to brought in geophysical motert Dorphin to comb the res with ground-panetrating rare which picked up 23 errers of red material

The actual excavation has been hold up while Brosnan role en functs and obtains the required chacology profesor Bran Fagen of the University of California, Banta Barbani, Nasi no such reconvetors A special consultant for the Auchaeology imagezine. 'Is not a modern atropict Fageham parkets an enthyl regelmate target for anchaeologia exploration?' DO

Timing in Eavy: Income of the expense, DeMille built a plaster Egynt in the Catheria desert for his 1923 Ten Comreadments.



POLITICAL SCIENCE

A TOUCH OF CLASS is rioting the moral equivalent of a hostile takeover?

By Tom Dworetzky

I dems. land of natural coastroych, is abla land when 1 wat a solution to the solution that i loans and the solution of the transition of the solution of the transition of the solution of the base of the West Coast is native base of the West Coast is native Americans, the works all solution base of the West Coast is native Americans, the works all solution base of the West Coast is native base the work of the solution base of the West Coast is native base the work of the solution base of the West Coast is native base the work of the solution which they of the solution base which the solution of the solution more specialized regulation. The grant of the solution of the soluti

An interesting thing about preboas like the pothisth of an called printive acceles is the sirwel knotces thy serve in mulmeterice accelerin such as that of the kwakut II was important to redistribute the wealth. A table



Angeles, they build a driveby fund rasse, trainer, by system rather than stippery paperend-pencil terce. meet ensure at anywer Loring the weater mambers made the positishon too small to accompleth execution. Larger scale basis such as hurring big anmals dynary other tribes keeping sufficient weety in the game pool Doublissey, was not alone basis in Madeon. Wisconsin (my eman manual, in thoring in the point those is a reasonable, were highliand the second second second second second in an analysis and the resolution in a construction of the second second second second second second second second second is a construction of the second second second in a construction of the second second second second second second second second second in a construction of the second second second second in a construction of the second in column to the rest of a second the in column to the rest of a second the second rest for the second the second second field second second rest field second field second field second in column to the rest of a second the second rest of the second second field second field second field second second field s

The acis tail the position the mean start is the position the top strength and there are top strength and the top strength and the mean strength and the mean strength and the strength and strength

The urban disturbances touched off by the Rodney King case quacky exobed from a cry for justice against police brutale by to a more meaningful demonstration—for economic justice When a woman taking a break tiom locing was anked by a TV reporter # site thought what she with doing wear right also an several "Everything stared why shouldn't it be free?"

The underlying sprificance of this somewhat induition logical was introping. In essence are from and by obtained the final case prostore of the Wall Shreek lostere was replay her off. The fastry control granes came down to a swape bottom her for her each the paster motion grane the method was result in the you no place in the water. The meether is marked was the The meether is meating to the meether of meatand came.

The thy bohns the ratio local coil is call angles. But, which do indicate the wave of hetable down might-advances (Hesa) to all colours dennes that presed it melan dolares. These downs gave mony to all any "Weine part of the system where investing in the rules of the gaves the wave win "The local ing by the dissioned in undaria.

The note were not about no constant and provide models in our when sower and models caude provide on a lawner and caude provide morners of upper class constant. In the source of upper class constant causes of upper class constant. In source of upper class constant causes and upper class constant. In source of upper class constant causes and upper class constant. In the source of upper class constant constant class constant constant constant class constant constant constant class constant constant constant constant constant. In the source of upper class constant co



BOOKS

ON THE STEEL BEACH: John Varley offers a metaphor for our technological age

By John Clute

Design with the title, and the weather weather the title which means a base? Beach provide a start of the title which means a base? Beach provide a start of the title was a start of the title and the start of the title and the title start of the start of the title start start of the start of the start of the plue and may instead the start of the start of the start of the start of the plue and may instead the start of the start

Control for the control for the control for the control of the control for the contr

breading and brawing, preparing to conquer the new continent Which is did, soon enough



crawl up on?

For Varies, exercising his magmation in writing a rowal, the backh was acay to find in the Fulue Hetroy, the human model has been been the difform Earth by Invaders who termineted our lease when they found out while a mess wild make of hings, and 20 years toom wo are enter to ing in natmain carved out of the flow and them and infer damets We survey in comdons of steel, breating pumped at muling that the preparations new comgains which austain us will terrain status, under the guardance, of west artificial intelligence, proying that the vacuum of spore will not crockour sens. But the prisaries in beginning to mount the and of the vacuum of spore will be come of the vacuum to the became of Specificaent to the became of Specificaent back. Furnish and all or outborning comp

Think of the human race. It tills here as the two is a built "Process we are: It controller." "Process we are: It controller. There we are the financial control a bears of metal, where controller. Subject of the service of the service around in white we obtain our boah" (but "the sun keepter thy ing to dry spit the pool. Due waters accumulate, it interviewing to protect us. Accumulate, the service and no concern reviewing of the service and no concern reviewing to the service of this one tasts, and no concern reviewing to

It's only a story, of ocurse, tough beautily too and piledity arrayed with curring heats to beep readers from guesing teat Weite has no excluten to the problems he presents. In the end, fraumangly, nothing happera-in-transferry still geope and foundary on the sheet beach, and to outpare enterate in doubt

It's only a story, perhaps, but back here in 1982, is this leads bis a messpher—of warring and of hope—for our stres. For we have built our planet of dead these is no larring back here and new we mast bring cut hole to blast, our hears, our mode that is no larring back here been and the stress of the stress that be these as our sector. In the best here these as our sector to be the new are

As in the case of the lungtsh, the survival of our spectes decende upon 6.00

Will our species adapt in hose to servive in the increasingly arithmatical contronment. The stool beach, that we are creating?

WHEELS

READY TO ROLL Cars as communication and entertainment centers By Jeffrey Zyomont

Consider a Usuble merch and encoder a constant to can wrate control That approach on a store that approach on a store that approach to a store of the store of the biological store of the store of the store according to the store of the s

Coming system well still dermand scene addee husosse from drivers, but thurs so hubmidating becknebsts with suit to communication with automobility Delize porces are only the coberge sp. At the and of 1991, an estimated 7.0 million U.S. care had cellular phones, showing had cellular phones, showing how eagary driven plag into communication. Now comes integration. In January, reado maker Baugusta introduced combine the cellular phones are to file. ther are voice activated—no need to take your hands off the wheel 'Communication and entertainment go band in hand', says ina Tabankin, goneral man ager of Bisupunki a mohrie phones "It gree us the opportution office information compares."

Care smally have no econ file duplicate bits of equipment when say a pingle video screen can serve up newgalian mapa. RC dapatage, wanale information benches, too many aspaniel outnois and dapatys create dangecas distractions in autor. Preventing distraction after all, a with U.B. law prohibitis TV nooppion in the from ceat

The more deal with those TV, while that even with help field only deal a single access simplify the bary is an angle access simplify the bary to any note be recording and as a control panel. Already Bory's indication piccine table allows on some indication piccine table allows and the access the sources of the access of the sources of the access of the sources of the

general manager of Sony's Audio

But no mixture what goes the aut. If will remain geometrial isolated until tensional communications go wholess. That's comma, too, in 1993, Motocoli proposed an indum Negrouns system that will trik calls by satelitie. The roles entering whether any satelities in the second system is and the minimum whether any satelities when they are any will complex when they are being incoments when they are being will complex materies and cellular systems.

Another big boost will come from digital communications high now devices low motion fores and computer modules and outtake prove transmission and outtake prove transmissions of any sector and any sector and outtake prove transmission of the sector and any sector and any sector any sector and any sector any processing any sector any sector any features to simple banky code, the signal black sortes the any any sector and the sector the any any sector and the sector the

Arreacy cligate onliker pione sysforms are carefung up in Los Angelles, New Yen, Chicago, and elia Weara. Proposala for digital rotho are under study. "Were about eightyees away from a new format for understanding from a new format for one, period will always.

Situation remain Forona, flucscreen and words technology meet more development. Also, with more galgate, als companies may have to double the power of vehicle electrical systems to 24 volts, heavily reworking big durals of quot technology.

The optimism previats Wilkerse noise that in 1987 computer clips for cliptic logist processing cost more than SECD per set. New east, though emailter than its prodecessors, goes for abruil SEC "As this technology bacemic salaer to use and effodible", cays Homish, that 45-minus cormula will become very productive. "O



ELECTRONIC UNIVERSE

SILICON POLITICS

Turning presidential races and perestrolka into sound bytes

By Gread Keizer



The existion verus hit late this year, there to the Gulf Wer and a psubty of name-braned Barno enses cancilations, but when it due intest the body police, it exerced to a 101-blognes twir. Bacharain access against Bash, and Chritten locupt otherpos of chait deciging and diabitrary with damain.

Back in the U.S.S.P.--oxe the Commonwealth of Independent ent Stones-polece battled State

see an end to the end of the Empire

Bo, what does all this have to do with games? Planty

If we can melle electrone entertainment out of war and munder, we can our tanky pay computer games based on poltics. Two new bites do just them—and in ways as different as the political systems they model

Prodigy the online service created by

an IBM and Sears partnership launched The Next Prevent (IIM PC and Macritosh) in Fab nairy and plans to run this multiplayer political simulation through the end of this year's campaign

Unlike most alloctronic gentes, The Next President shift patt you against the machine but is open to anyone who pays Prodigy's 312 95-per-month tee and can call the service is controlletes with modem-equipped PC

The locating may be sold out, the solution of the sold of the analysis of the solution of the solution analysis of the process solution (theorem-buck the process solution) the solution of the process solution of the solution of the solution of the distance sound break minimum of the maximum of the solution of the maximum of the solution of the process and locate and solution of the the transfer of the solution of the location of the solution of the solution of the solution of the location of the location

Play voter and you get to opinio on angle key issues. Your vibes and those of the other players.



rgely decide the election

Though the game works from a samp; which includes steamy exposes and even an assessmtion attempt, "We nearly don't know what will happen" says Robert Genorsem Prodigy/smsh ager for entiritierment.

The convertions will coincide with the real ones, the online delegates choosing their party's slote and platform From Septembarthrough Bootion Day you'll assume the martia of an average voler, abla to taik quashons of the candidatos at weekly writual town meetings. On Novamber 3, you'll case your vole and wetch the castro come in

The Next Passwert is shall'n gaming at as bast--the simulation appeals to the millions of home PC owners who don't normally play computer games. We wanted to show what the media can do," save Gaberaam.

Spectrum Hotolytes Create in the forentim OBM PCD-ne-meakee the other autie of the political lap-central control, boups, and Communications and Communication ferent lend of game. Critic takes you back to 1985 and sets you up as president of the Sawel Unre, with a head-hire, potenties.

> nationalist agends. You have to device and choose polices, soil budgets, menage onese, loadp fabs on the mode and hack economic, political, and social indicators.

Although most of your time in Drak in the Komin is spont manipulating numbers-nables there, you can be there—you can oper to unreal by eliff arring the mithary or boost productivity by instituting a longer

work week. Urpepular policets, as Gorbachev and Vetsin decovered, may force a coup or pul paople at the barroadea

Both The Next President and Cross in the Roenth take libertails with reality Take each with a grain of salt and you'll have fun, maybe even learn screeting

Maybe a game is the way to pick and keep a leader. At least weld have more fun DO

TRANSPORTATION

WRIGHTING AN OLD WRONG A wing design overlooked by the Wright brothers makes a comeback

By Kethleen McAuliffe

store the case with ing remains at times, uncetting celm days, and on guely days, katfuel accret fatalling to create ma-

been safer and smoother in fight than the Whighta' food Who which resisted the wird

with their historic effort mener cost Hawk Later, George A Sport George G. Spirall improved free the Thickes, But by then the anything new Jaments George different peth? History of course, can rever be replayed wing, that picks up where Cho-

To the own, the firewards looks beak edge. Hinges, rather than bolls alloch the word to the Latages over conventional ansials. nerice any disconfort. "The freewho writely eliminates an onk.

lates iren less woor and foar on the erroral station or showing day

planes" according to Bruce

add up to her sales. Aeromatical thas contentory"

The military has also ex other meeting that can't always

competer in the multiplikon dollar er planes which



for a place with a



cuestion is how well the fragmental from a hyp-transpercer plane to a pare bels its a household name by 2008, esprepaysory of powered floht DD

but a Manfand con update of the concast will be

GAMES

How much do you know about the rules of your favorite sports?

By Scot Morris

within 55 maters of the start

rules led U.S. treastaboliers water, a much feater and

5 A pole-vaulter uses a pole

11 A ferrale swmmer wears 5 L. There are no

16. A yallow had in used in

17 A wrectlor has a beard

2 | In April 1954, U.S. inches In 1952 when the 6 L. Siruce 19929, it has been

12 L. As of March 1991

several monite old 'OO



CONTINUUM

SICK IN SPACE

Why astronauts toss their cookies. Plus, diamonds aren't a dinosaur's best friand, and where old telephone onles on

Forpet about the exhieration of

the eve sende a signal to the



space vemist

tact larges on our celestral excitor ers. The lanes allow for the refronsula' eve and body McGill University in Montreel are booing to make firing in

Space motion sickness (SMS) is a senous ocnoem in stutia tars expanding SMS on subsequer mesons. erate SWS by revoluting centern head motions that are And it 1245 space hold, they reject on ant histemine called received and a received of the received and the second of the merry some malady SMS ent just uncomfortable. It's dangercus If antronate want in their school suits while on a

While results of one space motion address namericant dation provided astroneuro with extra-large Bausch & Lomb contact lenses designed to got the cortee year traffily his etched the larges with a pattern of prosshatches, bulls-eves, and asteriaks so that eve motion

ferent seeeds. His even follow his sense of motion with a joy stels. To complete matters furbody literes out at werd angles.

eves normally rates saged us

stablize the even and keep the visual held from blumma road that the brien when faced with the umeschistic "sensorwmotor conflict." produces a chemical substance

In the dome experiment, which has been performed opvorpi times on missions since 1983. the head has been inside the dome is amplified. Young hopes his computer

lens experiments are expected by late 1992, put Yuuna and Meahel hope to learn even more after addressed as that astronauts minimize SMS by avoiding active head moveconts under the last to simulate gravity or wedging into a corner to care takef from the lealing of liceting

cancidate and is training for a 1993 space shot-believer ics set in . It was once said that the only runs for metane churchward until it goes away," he says. "We think we we



CONTINUUM

upset the belience of the blood cels in the brain. effect when it penetrates the blood-brain barrier. It also acts as a voseel cligaty "

cusil don't internant -Honry J Kasor

TEACHING OLD

Ben Balaiey, an armon Soproce of the University of for collargues who want to Picking up where Bereaten

may before in a 1000 kite-descring associates Wihave "Local and los Williams Pacific Cosan to measure electric fields and other that success. Twey ve proexperiments at the interval meteorological pourprient

INTELLAR WITH WOMEN THAN WITH MEN.

SLAMS ITS POWERFUL TRAP SHUT ON UNRUGECTING DREV IN LESS THAN HAIF & SECOND.

English left of 240 years aco. Raisley topes to usbet

Doe of the schoolspre of remain in one spot in the water vanor, radiation, canner Invests and so torih. Thinn's data ' Polsiev says, 'Satel-

The equatorial site's horptable climits and dependdreams -- Steve Nadis

"Fin not alread of proving

OVER

Everyona who's ever had wahed for a hangpetr cure that works. It looks as though a Reach boohernet has concoded set such a

When taken with a large class of parriage luice before noiro to had after a right of danking David hi Elennin teanyaamide (P.G. and annicomen his second or cract. Sola melarità ristana continued and that after three each drank two trollias of and cooper coolitais. Using a ciracal scale decent by Blood doors Concepts 14 (14)

zero is past and 11 is worst. allocest hancover blankers

the investor's coutin and her bornet releving the nausea. beoriacises, and stors of the ing prepage upop helps, too

coord / avoiance Weiter Flass

WOULD YOU LIKE SOME WINE WITH YOUR TELEPHONE POLE?

Just altern you time: modern sono-ta au uccerand every characteristic ta au ucceand every characteristic ta au uccetagia pinal, it comes up tagia pinal, it comes up auditation and tagia pinal, it comes up auditation and picuri development p

Microterra, based in Roca. Riston has located tool netogy developed by Reth Porter head of Locaserra Stop Lowershy's institute for Environment's Bioencoe and a ponneer in the load incom a boromochoo, which uses microcraniferra to convert fixearrobo, autor based watte to an environ membry borg form. Porter

THE FORCE OF A WAVE DURING A WINTER GALE CAN REACH AS MUCH AS 6,000 POUNDS PER SQUARE FOOT OF WATER

IT TAKES FIVE SECONDS FOR MICE TO COPULATE



Many palaphone poiss will epon become food for microorganisms

has failored more than 1,000 different types of moreor generas to or wheely any substance, angreg him persisten to PCB. The LSU membering and adapts others by feeting them on the expression substance twy/T be expressed to devour in a heardown emotionment Prevent shall for construction of the bitraphone pole recylimit bitraphone pole recyal the area in "Bablia". Locusature Planch personnel will first streed the polee into others and use a watering process to ostreet as much of the develop interface and personal and the pole interface process to ostreet as much of the develop interface. The the objets in a servery and compast the moture. The bags eail the remember downcast, and when they're down, they became a food accure to the other organesms that live on the wood. Microsens will then sail the desirule wood its paper mits for making crude paper and measure board.

"Men has lost the capacity to horise and to forestal. He will end by destroying the earth." —Albert Schweidzer



Test new for cockroncher

A GRISLY DEATH FOR A GRISLY

The teerd under the beau of encounsences to muster much sympathy for the nearly indestructive cocksocial bar you have to test at least a life pty when you have well science has in score for it a batted chamber intersion to largue that melicits the movel and devocars its internal organs. The postant approach approach weight of the source of the source of the method of the source of the source of the heaved by the the source of the naturally in soil and auxily in soil and auxiliary of the heaved by these the answerpoints much the source of the source o

grows on the insect inelaso of having to be eaten by it, it's more efficient than other prendicial, seys Poussol Bio spokermen Richard Herich: A engle occivicación could spresid the fungue tixough a whole colony by creating over and naming with other toaches.

The on The sector of the sector of the The on The Sector of the example of the sector of the sector of the sector of the example of the sector of the problem for us because the sectors may be sector of an expering " Pending approved by the Environmenth Petrotection Againsy the posticular de Environmental Petrotector Againsy the posticular de Environmental Petrotector actual or examintions by parts and and to the general public other that — General Paulic and the that — Bears in the sector of the sector of the environmental sector environmental



CONTINUUM

SHIVERING AND

to worry about earthquakes away from say, the San Andreas built thris again mologist at the New Visio State Geological Survey a houses, with inset means that

regione. The 1980 quelos

WHEN ANGRY, MEN. ARE FOUR TIMES MORE LIKELY THAN

IE VOUL EALL INTO QUICKSAND IS DENSER THAN THE HUMAN

near Milton, New York, that crypsoiring. They followed a

Inequiar ground fractures





Fortunately because the narrow and smetch only a few damage is mount! "Aleren

vas save Also, the cracks her man her an in offician

and the water soparids, but He belows that once the the shorient starts a tenior againg high-fragsena-

-Parrice Remes-Eveney

"Text is the art of constraints -Baymorat Monimar

Part an entreme sustant in other grains plays just as



switch missives activiting a

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OYSTERS, THE

PLUMBER'S

MULUNTINO

A protein from ovster isolated by scientists at this Unwritely of South Alabama pipes The protein testing put different aminowhich ones best ninbit acaling which occurs when

peerls in your pipes

clogs and other problems verifaces is that it is relatively cheap and ample to The researchers are currently produce Basically, explains aust strake and baker it acute hook together in a Polyagpartate is compietely biodecradable and

ment, unlike chemicals they may not have a choice: Baum officient mouletions may force them to clean up their act .-- Steve Nadio DID DIAMONDS KILL

THE DINOSAURS?

had their share of problems

scientists recently discov mighty beasts m a rain of demond dust from the sky Carisie of Environment Carsels in Otiwa and Palaeprintozy in Drumteller. Alberta, found tray chamonds Alberts that date back 65

seteroids falling right and left. (million years to the time of monds to Earth or created In either case, they speculate, the chamoral dust and other details of the collisions amaphine conceiveby

blocking enough sunlight to clamonds have appeared in

other parts of Canada, which microdiamonds II diamonds do indiaid turn up Bramen -B# Lowren

If this is the land of the free, why is everybody trying to sell you something?



The membra below the Opinion, the opinion of the sector of

that in his time off, he had actually learned more about his form That was in 1984, the

That was in 1984, the year: Drogen Croslav were a thome meal in the Omnobe Neoring to soowned meal at here wered meal at here countering. Today, he counters the national meal her adheric at the at here at here at here at here at here and the adheric terregit. The east the adheringe edge. They are wash then media they are were then the tog and the source were then the tog.

a trong men location." Who the Tigs has break located cargo many the term of the transmission of the term of the alternative term of the alternative term of the alternative term of the term of the term of the alternative term of the term of the term of the alternative term of the term of the term of the alternative term of the term of the term of the alternative term of the term of the term of the alternative term of the term of the term of the performance. Could be term of the term of the performance term of the term of the term of the original term of the term of term of the term of the term of the term of the term of term of the term of term of the term of the term of the term of term of the term of term of the term of the term of the term of term of term of term of term of term of the term of term o

BY PAUL SHEPHERO THE TORCH OF TECHNOLOGY



IHE SCIENCE BEHIND THE '92 OLYMPICS PAINTINGS BY KYONG YEDUII KAM U.S. Olympic Training Center's (USOTC) operation method superor. "The sports asentests here want to understand more," he agai. "They do not just come to do the job every day." In the USOTC wealth room at Colorado.

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Over the need four years, the need team the trening centers a peparations for the Barcelona games to the 1996 Summer Olympics in Albata will increasingly fivor those etite adhees who wanted in understand the growing role that science and technology play in providing them with a vanish of servors that accord the comer is equiment tike 3-D vaceotapping that cen ole Softe almost every mean all in stretch of gend mar possible, the markpain of every means that all the stretch of the stretch of any means of the stretch of the stretch of any means of the stretch of the stretch of any means of the stretch of the stretch of any stretch of the stretch of the stretch of any stretch of the stretch of the stretch of any stretch of the stretch of the stretch of any stretch of the stretch of the stretch of any stretch of the stretch of the stretch of any stretch of the stretch of the stretch of any stretch of the stretch of any stretch of the stretch of any stretch of the stretch of the stretch of the stretch of the stretch oscillation and the stretch oscillation and

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OVER THE NEXT FOUR YEARS, THE ROAD ROAM THE TRAINING CENTER'S PREPARATIONS FOR THE BRACELONA GAMES TO THE 1996 SUMMER OLYMPICS IN ATLANTA WILL



INCREASINGLY EAVOR THOSE ELITE ATHLIETES WHO WORK TO UNCER-STAND THE GROWING ROLE THAT SCIENCE AND TECHNOLOGY PLAY IN PRO-VIDING THEM WITH A WARTERY OF SERVICES. Where not relation, the experiment account of the intervention of the state of the state has been as the state of the state of the state of the state has a state of the state where state states are been as well as a state of the state of

mits "They said It would take years but we think we'll have something by this tail."

Writes tour years, the DAS occid be adopted for use in atmost any sport Combining the sensor packs with video mapse and laser-temp devices or detailed to how hout or and sensor the load hout and device to the load hout and even competencies inscignt to be able to tell beorg plove could be minimised to pack compando source of the pack of the load hout and the sensor of the pack of the load hout pack of the load hout pack of the set as pack and the load hout pack beat as pack and the load hout the set as pack and the load hout the set as pack and the set as pack and the set as pack and the load hout the set as pack and the load hout the set as pack and the load hout the set as pack and the set as pack

contract could break apart new jum, see organization of the analysis of the could be apart of the Calculate could use the information to perpenditure country instant, and could new the country instant, and could be applied to the DAB to perfect their techniques and coured vectorisations; for example, a network within country instant, and the country instant information of the country instant of the formal with that and. Of occurs its most happed information to and leave will address agrees in the assertions as within the most instant end sectory is a sub to period the most instant and the country instant of the instant instant with the most instant and the instant instant within the subtions with the assertion in the period the sector is the most instant within the within the most inthe sub-times within the sector is an interpret the sector.

Probably the most obvious indicator of an athlete's condition is his or her ability to use oxygen. By messuring the levels of exhalled oxygen and carbon doxido, physcologists are able to determine a competitor's acroher threshold and anerobic ca pacity, which is required for interse bursts of work. Over time, they can moreto which inverse meltrate have of everrive, or changes in page and intensity provide the preasest improvements. Today, this data is other obtained in a laboratory or by following athletes with a golt cart parrying a meteorological balloon or "Doubles han" that collects ther exheled

ar A much smoler and being tested is worn on a belt the Coerned K-2 would practically elittle Douglas beg and the timesport should soon be able during schual play rether tranno edos anos diferdifferent types of conside tass to use dover. "The day of a coach saving go and Ton Crawford head of coaching developor coatining coverous know the local behind their training, uhanges Mo, in many sports, that of litio benefit "

in the enorte paycholoor lab. Sean O'Nedi, the U.S. chartenon in table terres, side interdie an Alpha Char, an eco-shaped audio-vasuel chryster Spesahim with the voice of wall new typenet Shano Marvideotace of one of tex descention be wrote of his performance Belore

will be able to refer the months promptment of the Alphe of er and yeuologia few less narinmance. Dunna the year O'Ned is spending at the USDTC to monate for he Overse qualifying thels, he wekee up every morning in his dorm room end series he real 7 an a maniper of the 1000 them-and melone the team. "It I had to say one thing that surprises most people shour table twores, it would be the emount ot mental preparation I do. I spend one to AL CAM

THE FLOW STREET "I SEEM TO HAVE ALL THE TIME I WANT TO THINK THROUGH EVERY OPTION LIKE MY MIND IS A

THE INTIMATE

Remember Pana? Your ante Gerne was moving your "biat" noridie up or down one adde "bip" bail That's changed Tochecks were applied in a table territie plays the game The move

Revelate with a court pa: Committee. R.4 nearly any profes-

Up to three "throwing hence" spit table termini ballo milos perhour Aureque complaying a match, including not spin, but the angle of the the table the ball will land. The report even accounts for relatod factors such as temperaplay on Mars," may its creators

> tourn member "li lente ma Now l'8 have a world-class opborna " Witten a fire

years. Falcoff sees the robot player or coach to erraply tail on much he after to add other

O PLAYER SEARCHING THE ENTIRE OVSK FOR THE RIGHT SONG." O'NEILL SAYS "UNFORTUNATELY IT'S OVER BEFORE YOU KNOW IT".

one and a half hours a day suit on mental transmousle and include a day just on mental ting, and listening to tapes "

According to Murphy, the most elevision pushes for companies in the state of fine formance when time slows down, objects appear larger, pain is blocked, and natiing can go wrong-everything is second

osture As O'Noil taxes 'I ery onton like my mind a the entire dask for the that it can be difficult to reversion and good out. doesn't seem to make mich deference pipelare inc the state of fire They know what it tools nen. Once accertists beinggers the orset of this peak montal state. Thou intes figure out how think can induce flow as succoach (h) as three provider

peak of their obtained and montal canabilities porte-Irres opens now sets of qualition Scientiste have long recognized the potential of performancehormones, and other forms of "blood detains." a practice that other nations (especially the for-

mer East Bloc nations) have used. The USOC however, a committed to field who an Ownpic team that has achieved the an Osympic ream that has achieved the out the use of doping. Pligorous tasting and education programs are designed to enwas that observationical wards with its storoids, synthetic hormones, and other forms of illegal performance enhancerecord one not used by rain athleten

Our scientists, on the other hand, are interested in learning more about the elfasts of transport on patiently occurring



Concerns related to flucted growth formations related to flucted growth parallelities for hand statistics, node growth parallelities for hand statistics, node growth parallelities, and controls, the determine measure and or flucted states, growth frommaries, and controls, the flucted statistics, and controls, the statistics, and and the statistics, and controls node of the statistics, and and the statistics, and and the statistics, and and interval statistics, and the statistics, and and the statistics, and the statistics, and and the statistics, and the sta

Protog the nost effective ways to be the tent that will be the owner ways a submature years a another a new where serman class address that are where sertions in their demany, the area where adhesen to growner will be accessing of adhesen to growner will be adhesen to growner with the adhesen of growner will be adhesen adhesed in the growt distance to the type of solution, and well be head of the Sports Expension diversion head of the Sports Expension diversion. State, ore that is more democraticand, as always, less right "In many of our sports," the sarys, "you can effiwelk on the field to the Corpyro table whose having been part of any organuad training" frough people was indexed "tableed" in many sports, but screenting in oary offichiood may errent too native and exclusive a prividea for the US Chymeir example bodies.

Classification acual take to see the United wavement of the citation in Clemes to the take takes the set of the set of the set of the takes takes the takes the takes the takes takes the takes takes the takes takes thermatole by takes the takes takes takes mode producing backshort in Aronne of Clearing and takes the takes takes takes takes takes the takes takes



toned by many people at the USOTC is the result for uniform levels of coaching certification that would include traning in the capabilities of all the arress of aports science.

What is the future of science in the 11.5 Okmos peopram? The assess lies in knowing both when to embrace technology will somehow provide a subabbute for the basic incredient of any \$5perior whiles achievement lots and ments made in small, unepectacular increments. The goal of everything he closs, says table tennes champ O'Neil, a the empleat of all: "just getting the more time " Psychologist Murphy too has noticed this common alomont of mental hunthess and selimoness in prised to and a few compatition who successfully dely the modul, whose training habits are "horrandous" but why mu-

On the other hand, some scientizity believe that the work of the programs. becocharges, and the work of the origination LEOTC is not imbiliate enough Poter Reven, the editor of Medicine and Sovance in Scorts and Evences quarters aniliate depend too much on simply describeng or measuring rafter than aptwely influencing training "Without know what a personal psychologist conercise is not really being done at the training mechanism or why some thangs work and some don't Winner that we really pan't over the when some their performance." As an example of more experimental studies, he ates the much as 50 percent with "surprising resuite" Revers helevos that to be mile affective the U.S. Olympic project warrh into the affinance of both tradi-

Scientists at the USOTC are not, however, shard to dwarn. There are many territories, aspecially in communications and computer programming, that they are annous to explore despits their are annous to explore despits their

IS DAN

hout 35 miles outside Medicid Geograficanto Ecanomo Ecanomi is buried at the Valley of the Fallcan prisoners after the Spanish Civil War Durant the decades of Etacoria the founder of the Felange, or fascost redetation and as a nation sup-

Now in a suburban area kust a free

loks between the world of Columbus and 1492, our world of space exploreton, and "the unknown that less be-

from the Soward stand of Minorca, con- in the country's own borders on the libe-

During the 40-year dictatorship of lived under a system based on military power censoratio, cronvian, persecuthat saddled the economy with lags in ov "In 1982 when Felme Genzaley the

dark area of the dictatorship as a dymaps 1002

For much of Western Europe-Indudrag Solen, which in 1995 joined the Fumotion Control mille-1992 was alwards

were have mugh more to do with the buhall that with its mast-much more to the achevaments of or reflecting on the mistakes of bygona years, and much more to do with working toward Gonzalez' coal of a country that "functions." The covernment has capitalized on

cal park" to open at the Even steller 1993 as a vehicle for modernizing and operation the according of Andraucia Spein's largest and poorest service. To A vinced about a clozen companies, in-Auchono Bank Xasnay, Fullbau, and Bild Mass-among them the National Mean-

SPAIN CREATES THE FUTURE Article By Elice Hoffman malized that the "new" country had to operate on two levels at A DESCRIPTION OF men consolid ing political economic, and so of Income tellifier of a modifical mees with Ea rope and the femerica. 000000000 of this centurysovel and Paviland dates from and all fears sector back The and her scalp-Europe, Today, city of the fathe emperation in Seville and less of the France, Barture labove celose has his-Barcelosa ture: Sperts hall Gener centerl. riefeti: a build the summer Future (opposite is a city with a class events in Obvercion in Bar-Indeally been ing is the mage, teo 1992: the colona, Pictures anningly studen a comparable definite strat. Contex Marsh eits of Mashall of Casilla entrying a encieve in a ery of Internation adlitudant in olind "The six month-long Barcelone's Valencia, a dar" firm might in the old country that has aliveties. The rebirth: Located oity is now compet-Expo-the last interior shot of often heen world's fair she disting on the Meel. har to become Investment de l'Europe terranear, less the site of the range page, top right Furgeean a scaleter

miss from the center of Marinel Span a 276-toot-high iron l'arreliere in 276-1307-1910 Inon all agreed by there and role and the part of

yord." The city of Madod and the schore have that like the Fifel Tower. Five bundled years after Columbus

miled to the Caphbean from Hadel in log geople is deeply engaged in total to build a New World. But the firms the

Space most passiverus palantel cleby newspaper. The replied The change will he that Snow will Supphyse

After Everyon's death, Speen set (eff sam modernize the occupity and th stree notes and percent therein and a in the end 1990s, comething day har-Batael Trênor Suèrez, a sculptor location la much closer to home-with pened Span put a date on its concept ket on January 1, 1993 Then Snam had for and won the approachin of two working and the approximation of the no-fail last work? a fair of the cost rul

(strong execution the recommendation 1492 a prime (eat at of the Exce ste is La Cartura, a manasterio adara Co.

these 1992 events to rebuild a country ciercreation in all years of divisionships take mussion public works preacts compreting talentings and other commubridges, and apport terminols, and ma or any polytom is thigh amount to an ophandeit hones will stimulate growth into the twenty-first cerciliev Many of the new personane commons

electronics Contex and the Institute of

In Barrelona, Moury Paarcal Mare coll-who shuthed ushes of anony at the Net-has seniorly proport the more hald new core (see schebal). On a new



THE SPANISH TRANSITION MODEL

Does it have anything to offer other nations? Journalists and politicians respond.

The short 55 years, 5 Span hav, replaced a distibuting with a distrocategy, and a represence mitistry toprevention as a system that guarantees own libertios and pomitis ear pression of matority outural values. Can Span's expension serve as a product for this strong the thread of the strong the strong the thread of the strong the strong the thread of the strong the stron

¹¹ Them fast appendix the state of the second are not during the second and second

Substa says that the new system ' allowed all parties, including the Communists, to anter politics openly" deluging some of the power they down form being torbidden. In addition, the new consatures gave sativitat process such as the Besques and Catalans the right to chare power with the central government and to use that can languages

Carlos Zafdvar, droclor of stakes at Monoloa, the Bpanish White House, reports that as the USSH was breaking up, its lisadors approached the Stresat government to bask advast pressue of network sepanish proughts

 Noppe age motivation manabal hardners in her an errander of her and expresses doubt that if is possible to because more policial and acconomed spatiants simularneasing She wonders whether Eastern European ocurities involvnations of the wonders plant capitalism in countries whethat is democratic tradicon with the associated.

 A defi to policial automocity will not automocity will not automocity will not problems "When poople are under a deatopolicy and and a deatopolicy and a porg to solve every them but in the deatopolicy is able economic probtems, you need to addr very hard, addottem must be responder." Suben sem

 Direct contact with outside outpures through tourism and sourcing students to source students to source and makes the minimum and makes them more receptive to change.

Isca-accompatitimenta in the TV years since Franco clied. TI was as if our ourtry-head been inteen during the CWI War and the France or al." says Spain a embassador to the United Steps, Jerme de Oyda. "They addeeny we had to servic we did in a twy vegars what it would be some meny years to do "These undanable achevements relicido

 a nonviolent transition from dictatorship to democracy;

restoration of individual liberties.

 revisitizatori of an obsolute economy, evidenciad by an average growth rate of nearly 5 percent—the highest in Europe—from 1986 to 1990.

 a flowering of art and culture reflectad is growing recognition of Spain's artsis and designers, and

definition of a role for Spain in European and global politics

Conscious thist an externatived 2 billion verviews will see some sloce of Bparrish Me on television during the Olympics, the Spenish have latitoaid herd to forrisilate the message they want to send that Span in 1992 in a New World—a Winnit, programswe ocumpy.

The second secon

To regard to June, Bonen has focused in oranges orientally and externally at the same time. Post-Panco, Spain faced many of the same internal disubtinal confront this new literated extertions of Eastern Europe – creation of new policial estitution, passedul magation of long processed maternal and output groups into the new netron, and output groups into the new netron.

Ten years allot the substitute the electore pertages the storaget pillar of Souri's laters in the almost universal support for the new democratic potocal system "Democracy in Spain is allosability tratatical" says Actor Suinal, minister of industry and energy for Catalonia, the provrise of which Berookous in the carriella.

Bown in 1902 has a democratic constrution a respected king. Juan Carlos, who is the official hade of stade and plays a viable role in representing spain to the world. The elected prime minister, Friep Consulta, whole Social is not hole controlled the operations.

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Now you can acquire a destratig re-provise of this astantibleg sward. Its hill and explosed band wrapped in fee braiding and salectirely accessed with 24 baral cold electropiate.

The decays alog the hand pained symbolizes the silverback the throwing star, an integral part of the Hang's ingentiery engined nexts (Benefit this guardiant as associational oragan And both are carted in 20 knowl gold, as any the other sandphanes that game the parental, bits, and seen the bidden 'theires.'

Error the crafting of anth second is in obtaining the blades in Japon Hones days, the would in bring emoted by the master swortdensities all fields, Spein, where containes of tradition of the craftermonth has made Telede smell the world.

But the second work is availskie exclosively from The Franklin Hint. The issue price of \$455, payahi in memphy lastationests, ancloses the hardwood display sland.

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Top the powers' analytics depicts a formers' warranmeter the blogs's sensory, and in logared as 24 kinet colddurates depicated on its segmen-designed base. The foreaof the shopp will be a dreamable access to an fore-



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for tan years, a two-house parliament called the Cortes Generales, and a sort of fidarial system in which the central government shares certain powers with 17 "ta (momisel" or provinces.

Since the theight denotative routine is an attempt mittary coup in 1981, policide polemics in Spain helps bounded between bound and in the a denotative and who should nuit in the one with their thread bound on the one with their thread bound on the one of the should be a denotaing operating the should be a denotaing operating the should be compared by denotation and the denotation and probleming, the debate between the denotation of the classing or replace the Social a attrition of the debate classing or replace the Social a attributed by denotation of the classing or replace the Social a attributed by denotation of the optical available.

The shifting acception to Spein's genrate acceptance of the new polices lynterin is the mitian advocacy of Barqua separatotic (in the minority in their own index, according to polity with their own labe, their demand for an independent able through voltant potential—monity assessentations of police or matry personnel whom they were as representations of the occurs of general method.

The Bacapos are one of several resource groups—the Calaber provides proprosence of the indication in solution, prosence of the indicational impacts and a set of the indicational impacts and indication of the indicational impacts and a set of the and a flow of the indication of the indication and differences in the metal appointed and set of the indication of the indication and differences in the metal appointed and set of the indication and different is indicating and metal and calaber is indication of the indication of the indication of the indication of the indication and different is indicating of the indication of the indication of the indication of the indication of the of a indiffusion of the indication of the indica-

Could Spein in the logaritum tam tag. Yogalows, a country where weredity groups believe that the only acceptation goal is a separate network and the only part to national service yronal observice. In recent years, most of Sparth naconalist groups have muted their calls for independence and concentration maked on torging cutural sternity and economic equality within the new Saarawa obtack were

This wolant expression of nationalsm will continue to decline," says Cados Zeldwar, disector of studies for Mondow, the Spanish White House "There are very two people who went this houlastic."

Subre agrees The provincial government of which he is a part has not only 20 DMst Covers an overall of the

BARCELONA: SPAIN'S CITY OF THE FUTURE

Wedged between the Mediterranean Sea and the Pyrenees, this city has once again been transformed



Tweed in recent Instruction III 1999 — Baselico na usadi the occasion of heeting internetioned associations as inmitiate the landscape of the only to create broad interest and more matic, pathe broad interest and more matic, pathe solutions interest and a solution the land solution of the Over the land solvers Over the land solvers Over the land solvers Over the land solvers Over the land solvers

The anticlefa of the other post-sector to other post-sector sector common and postmetry and the postmetry and postmetry and postsector postsector postsector postsector postben and postsector postsector postben and postpostsector postben and post-postpostOlympic Genes are over there is more to come, including a new convention center and port laceites

The measure laceal to control backage Bain coal Managel, and the president of the Cataslan table presenter, the Cataslan table poverment, and hyper laceal and and hyper laceal and south hyper laceal and south they set out to software capability which they set out to software including the software of meters in social and meters in social meters and software of meters in social meters in social meters of the software ones software of the software of

To the feasivers water, Barciclers can appear as a noisy, clagged raid of the industrial Revolution but on classer inspacbon, the charm of the modewal quarker, the bearty of the standed gikes and sinucus lines of its Modemat (Arr Noureau) envincement vibrancy of its streat life emerge along with recognition of its potenbal to be an international oity

The agenda for reaching internationation is long and problemation and Bacetona is working on it. Commissioner Manuel de Forn lats the following as some of the important problems to be terded.

 Allevinging traffic jams and urban sprawl by diffusing services and urbactions out of the center city into other neighborhoods

 Improving artino and port connectors with the rest of the world

 Reducing car traffic. In the fazare, you may have to pay a tot to enter the cdy with a car, de from says - Roducing the level of noise poster. "So far. Heel incapation of a solution," he says "Deen new sound entertheories don't seen to enterthe don't seen to enterthe don't seen to enterthe don't seen to entertheories."

Is all of this possible? De Form case two mapor potential obstacles own insert investig and, if insert investig and, if insert in the server of the annual to poor unskilled immigrants interm Nerth Alexa, is the rewardmen, the thrushe is open to? "10 speed in the server is the server is set of the server is the server is and the server is set of the server is the server is an error is the transition of the server is the transition of the s



A POWERFUL AND MOVING WORK OF IMAGINATIVE FICTION

BY HARLAN ELLISON

cards and his heavily (instrumed ment badge sash slantwise across his chest, he beined an old, arthritcruss the street, but he half outed stood the way.

ton psychistratio

officer on those certain the cross the was wearing the traditions 00.0 maned sharp and he sould be George Assor ut MD EAD (who had stud-

right on his past, lightly cleared his thread and phrased is differently "fear mouth is yarishi Those mouth is ... vanishing? call feature below your none. It's up coaring?" The prospective po-tockled quackly, with a bright, "Exactly," Dr. Davenment smile. Enantly mode another rate contrand to a cerate the inside of his cheek, then tried a their firms. "Wo're specie ing now-hoh hoh, to maintain the idiom-we're speaking of your here or your topents, or your pairto or your gurne, or your breth, or-

LEVENDIS: On Tuesday the 1st of writin My mouth, the alineas of my October, improbably chessed as an mouth. It's disappearing. What Explorer Scout, with his great hary part of that is great next. len?" Deversort briternid for a mo ment said. "Let me check serve thing," and he rase, went to the task and place bookcase against the far wall beside the window that looked out on crowded, lively Western Infact she didn't warrito Boston Common, and he drew down a capacious volume. He half-drapaed her, the old woman floped through it for a lew minutes. screaming at him, celling him a and finally paused at a page on blue colored and finally paused at a page on turned to the elegant, gray-heared gentionan in the consultation LEVENDIS: On Wednesday the char, and be read, "Laportomy," He

2nd of October, he crosted his prospective patient thad his head least carefully as he pat in the floe-

pechantly, as if to ask yes, and any in what? The pro chemst broad kaaned down and of the mouth The gray-haved interest who his carly sisters.

led with Ernst Kris and Anna but remarkably well-tended and Finuld, "Yes, ther's it, now you've handsomely tamed out, shock his gail it." And Dr. Daverport made a head slowly as Dr. Devenport his dotk, "No. I don't think so. It doesn't secon to be withering, the just, well, simply, I can't put it any other way. It's very sensive disappende ton Like the Chestern of ing away " Davenport closed the book and last it on the de out has humate stress the unknown and smiled conclusiondingly. "Don't you thick this might be a delusion on warr cart? I'm broking at war marin calt new and the debt there, just as it was when you came and the office." He re-The other man ant forward, looking two patient rose, whereved his home way services, and contract "White burn time the role, and started to taking all of it. Doctor The whole, ward the door, "It's a good thing I entire, complete apertute and ev- can read lips," he said, placing the archine assund mar under and hat on his head. "because I cat

ILLUSTRATION BY JOEL PETER JOHNSON





Open ten dellowert takto constrations for ine operations of your whitedia particements control functions from typocation to cocking. Whitewer you drives an understanding of vehicle functs with really you primerive your whichs and utimising help primeriv and nave party attemated functions and nave parperly discussed functions.

MOTOR OIL

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Change all at regater intervals. If the origets teo dirty suspended indexes will begin to sette and have adapt which will increase listen and sharten the life of the engine.

Use at least the grade of all recommended by the manufactures, Moto oils in eaclable in the godes megner alphabeleable from SA the lowed to SF the best. Never lass a grade lower than what is recorrecting by the meri-facture.

Use the correct viscosity off, the cody is a measure of its residences is how as the cherois at different impensants. Manufactures specify or viscosity or viscosity range for optimum Advection and cooling at all pervasas temporalizes.

Never evertill, Too much of will cause featuring and reduce the volume of of to critical parts, causing primate water

Always recycle your used oil. If you're not saes where to thing your loed ol, call your Bale Ferentmenten Censervition Bact Newer durp unol oil on the ground or in a drain Rementer, the oil hom ore typical or charge reproputy disposed wil but he table of over one million galant of dryling wated

Look for more GNC TRUCK (Fluid Facts) in upcoming insure GNC TRUCK with over 90 years experience balleting inucket, wants you to get maximum experient form you have



tanly don't need to pay your sort of exorbitant files to be indicated " And the movad'to the office door, and opened to leave, peaking for only a moment to readpart his homburg, which had aligned down, due to the absence of easy on his head.

inher, he overlaaded his property part with okra and ecopiant, gant bags of Kobies n Bits 'n Bits 'n Bits and sumho hours of Hundrer. And as he wilde try Market in La Crosse, Wisconsin, he ouroopely engineered a colleger her alone since the passing of his father thisteen years warber and Anne Gillon a been unable to find an august in take cial life had not improved in the decades since that death of hope. He beann screaming at them, as if it had been they fault theraby majeng allers of them He was extremely rude treathly storned every keying them to sort out their properties interving them to comtake notice of each other. He wont outrade, simeling the Massauges Bwer, and She would need a kt to the pas station. their favorito movie was the 1945 romanon. The Enghanted College star-

LIVENDS On Findley the 4th of Dotback to loand on retreater buder damping bady seeled carriesters of phenezee in an accleted piccie area oxidide Philipsburg. Kansan He shot him tree times in the head. The shot was wedged into any of the shot, wailing wedged into any of the shot, wailing wedged into any of the shot, while wedged into any of the shot. The benches.

LEVENES on Sauuday the 6H of Do book, he addressed are hundred and forty-lars regregentiatives of the country & avacatemizate industry in the Dinterior of the Copyland Hotel in Haahwide He and to them, "What's astrongtage and the them, are an addressed to be addressed to the set of the pockation to be addressed to the set. Sector of the complexity and devipockation to be addressed to the set.

@1991 by The Killmanyaro Corporation

selved. "Are you good, or exit?" He thought about it for loss than twenty seconds, smilled, and reprived. "Good, of ocused Theevis only are real exit in the world, medioanty." They applicuted grantely but policity Nonetheless list er all the receptor, no exist custod the Swedish methales, or the runais

EXPERSIÓN Con Burriag has the of Coconstruction of the extern numeric of a manufacture in Acceleration of the Acceleration of the extern numeric of a manufacture in Acceleration of the Acceleration of the extern heat in the acceleration of the extern heat in the acceleration of the extern heat acceleration of the extern of the extern heat acceleration of the extern of the extern heat acceleration of the extern of the external sector of the extern heat acceleration of the extern heat acceleration of the extern heat acceleration of the external heat acceleration of the external

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EPERDIS On Wednesday the 9th of October he sent a hist besits to Pethce and Fasctine Examplets a middle aged ecupie in Norwelk, Connectcut with had given to hoir summing son the gus his belowed older brother had used to kill himself. The scontparying note need. Way to go, sensitive Mon and Dadi

LNH-DES On Thunday the fill of Ontizer, has created on refor toorenteennor anoxe. Anyone could make if the append intel control to the conseration of the second on the conserlated of the second on the consertient of the second on the conservacellar the second on controcation where is presentationed control onthere is presentationed control there is presentationed control there is presentationed on the time to these is defined by the too encour efforts, and recommende is amountain used. Note of the second on the second on second of the works on the present the second of the works on the present the second of the works on

LEVENDIS On Finday the 11th of Op Index he investigation of the aide



proof Todating to beging to both "He was maintainaden by the ample of the height part. A workson in the "Miss, who had been liet out of a prory, safe to the been liet out of a prory, safe to the begins at their tables and the safe to the larged at the tables as a conservery to except a strateful called by the factor, and the safe to the safe to the safe to the safe to the tables and matched are provide the tables, and matched are provide the safe to the safe to the safe above and thought at the or infer. They imply intermise across and its keeps parents design at the safe to the safe theory and the safe to the mattering during the safe to the saf

This is a story tiled

You will find the scene of Odyssous's wanderings when you find the cobbler who sewed up the bag of winds " butsethenes, late 3rd century B C

Interaction of the second seco

cold cut hims and he removed his haves becaust and places in gently over the bodies of how women and is main lying in closes and releminated that is assay among the contexced bodies. 24 April 1945, Buchmenka, and the photograph would appear in a book published thay would appear in a book published thay by upsets latio, or bischrifty her taht of coult paid an instant before the other scales paid an instant before the other scales per Ner did he have the lation to acted ment and the flates that the latid scale prior that the latid scale per her did he have the latid the scales per her did he have the latid her the scales per her did her have the flates of the scales per her did her have the flates of the scales per her did her have the latid

LEVENDIS On Sunday the 15th of October, he did nothing His rested. When he thought about 4, he grew annayed "Time does not become socred until se have lived ni," he sout But he thought as helt with a even God kincked off for a dev

LEVENDES On Monday the 14th of Optabler, his olimbed up through the strike ing starred land of a Bellerine sizement oligibility his instabled, breazerig through his induch to block the emell of middev, gattegs, and units, focusing his mend on the apairment number he was seeking, atteaning through the evering demosar in the wan label of one hulb banging high above horely (km)called the service turned as he climbeid and climbed, straning to see the reservers on the doors, operation of fare investorators like him stumbling jamment into a corner of the last stop moment in the hopeless beam of weater out light failing from above. ing his one, hearing the welfare receivtake a shower, poind up till he had coached the loamost landing and Indframe, and knocking, getting no sinneer knocking again, hearers last the beating against a wall or the firm with a heavy stick, and then another close, and it was old but never had boen well-built and it came of its hingblack summar to had over som was looing the tata of the baby. He will have chose on the Krahm Babb, be odd not have an after with the field of a starbab was been and the star bab was been and starge was the a countyated and never fixed the accent bab was been and never fixed the accent bab was been and the fixed particular bab star bab star bab was been and the star bab star bab star the star bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was bab was bab was bab was bab bab was ba

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INTERVIEW

CHRISTOPHER MCKAY

As we've learned how planets work and continued to terraform our own, this astrogeophysicis thinks it's about time to put the heat to Mars

PHOTOGRAPHS BY PENNI GLADSTONE

At data, the set manor fine of the BD in monor fine of the BD is 120-bit with the region of the BD in the set of the BD in the set of the set of the set of the a data durating the gala by a data durating the gala by a data durating the gala by a data durating the set of the set of the set of the set of the Arran set of Arran set



Series Shook engneer Natri Brand ubes antimetor and paogravity engines to tarates coxyean term mosn nocks to make water and increases the gravity holding an over Laker terms water and increases the gravity holding an over Laker terms the gravity holding an over Laker terms the gravity holding an over Laker terms the gravity holding terms of the storing artite dealing frain deal soon looking for new works to leveriform

Cerl Sugar wrote about terratorning Vonue in 1960, but most planetary scientests thought More the only cendidate for terratorning in

the speceralt Gelder From his office hare, Chris McKay is planming to put Me on Mars.

Torin organisms figure out how to make do without do most anything also. The angle connegliable through the quiros as wetter. The ungle and the same constants are single from deep source. Convolved the water cons flowed on Mins. No testas ample the farms must how assist on the filters H we expect as areasand, with for flowing of signer in this popular weight has been points in the bornion and for similar the expects areasand with for flowing of signer in the popular weight has been points in the bornion weight forms have the flowed out popular age well forms have the flowed out popular and points grant weight for the same flowed out the similar to be anything the same flowed out the popular the same flowed out popular and the same flowed out the popular the same flowed out popular and the same flowed out popular and and and anything and anything a

NeXity tutiteess there that set with field unch does on a pirt NAS-hostical Scene Foundation exclusion uncy of the inteacts dry willing Benash ice 10 to 20 metrics their an mystemos depicies. In the vallerys besides ichen in ockwich can barn host ifs surveys and to where it desart in hostis conditions. This can tail us what happaned to like on hist, in easys. "Ios the panel grow cold and dy".

In 1989, McKey organized a meeting of ten Ames scientas's to consider making Mars habitable by tertaforming it, a word coned by SF enter Jack Williamson. In his 1982 novel The solar system. It appears to more reservoirs of least run of control check one and owner the interves to the Over 10 years came a space of horizontal papers on himforms that by raising the emperature time is state where CO₂ is these to where it becomes a get. The only presented exclusted the much mergers in the sufficience of the much mergers between the busines or one minimizer organisation to the much mergers in the sufficience of the much memory and the busines or one minimizer organisation to the much mergers in the sufficience of the much memory as a service on the much mergers. This papers to the sufficience of the surface one minimizer organisation to the sufficience of the surface one minimizer of the surface memory as a service of the surface one memory as a first the much mergers of the surface one memory as a memory as a service of the surface one memory as a memory as a service of the surface one memory as a memory as a service of the surface one memory as a memory as a service of the surface one memory as a memory as a service of the surface one memory as a memory as a service of the surface one memory as a memory as a service of the surface one memory as a memory as a service on the surface one memory as a memory as a service on the surface one memory as a memory as a service on the surface one memory as a memory as a service on the surface one memory as a memory as a service on the surface one memory as a memory as a service one memory as a memory as a service on the surface one memory as a memory as a service on the service one memory as a memory as a service on the service one memory as a memory as a service on the service one memory as a memory as a service on the service one memory as a memory as a service on the service one memory as a memory as a service on the service one memory as a memory as a service on the service on the service on the service on the service one memory as a memory as a service on the serv

At the University of Coloradion (Includer, Morkov eng groups on genessing with the olive of the Kin Morkov eng groups and groups of them the Weing sector. If all the sample of the sector of the research of the sector of the se

There are super-granchous gase, he reakted, 50.000 time more place time GL, in following here at the suffice Discovering how these glaces worked would reven tertherming powers in 1997 with throughprice contrins through the sufficient of the sufficient term (sufficient of the sufficient term of the sufficient term of the sufficient term of the sufficient term he dist differs the glace. For the last trans latitioning incoprate basis Aways short of time, McKay talkad with intenviewor Paul Bagne & Amae, after a geology lecture in Secamento, and at an argon while wathry to fill for key Lange. It is was hadad for a research project on the marita of robots—to learn who can do batter selence underwater a remotity pixed whole or a pould after remote McKar.

Onver: Now does your held work in Antarctica relate to your Mart research?

McKay: The first time I stepped off a helicapter onto a ledge adows Wright Day Valley I couldn't hap but think of a mission to Mars I aven miglined the place. "We came in peace, coastring for We." The dry valleys are at allen world On the surface, noting level in cyliants, no most, ho meacts. There is less proceduation than in the Goto Deem . We wondered just how long were there a few days above theoring on Nexs, as use see in the day validys. Our modules say ligad waite and the opportunity for the lander about about 500 million years longer than people though. The anterdor research table us where the last Martas regimeers were and how long they might have scrowed.

Cleans: Are lighten in the rock evidence for your theory that where there's unlike there's life?

McKay On Early, wherever there's a notice that if o can aspand into, it does if there is no life convertions, there must be a reason. The organization could anothe on the of they would live unmolected But things don't live on lice they would into a wome cound deterto live. If some alien called me to previous wome cound deterto live. If some alien called me to previous detertion the statest April.

PLACE OF BUSINESS:

Centin

QUOTE

Truly expect to lind tessits of blue-green signe and sulfur bacteria on Mars. It would mean freero file-green sime file all over the galaxy."

RECOMMENDED

Should Teles Heve Standing? by Christopher D. Store Cadillac Desert by Merc Rearer



Peer has never been seen, and it can go servicel years whout now furthers. The mean temperature is in-20 degrees. Cartyonde (G). It a the obtaint dread place on Earth. In the lane Severose, inner Readman of Fonds State University began his long study of the day walkys' lichen 1 got avoided and his long study of the severation to Main state.

The divisit of the second sec

As Mans lost its atmosphere: the same mechanism would have been at work. Gases needed for biology would get pumped into the lakes. Even as Mans grew vary cold, the serperature continues to go up and down from day to day. went to know what kind of life you have --- Td kay withinbased My essential into possible life on Nam all mixtes to the story of wetter on Mars. Where was it? Was there life in it? Can we bring it back? Water as instagroup for Me. Owen is wetter pacesary for all life form?

Motion, is there is the case - Ammona, the women's, dedicete there will were careful. An energy family what a means as using it, may be the bases for a land of 16. Thus means and the second second second second second the second second second second second second second the second second

Omes. What did the Wang Mission reveal about He on Mars?

Motion: It said all the elements needed are of the surface or same accessible torm, but have an oils of the over back a message like. "All the lights are on, but nobody's horn, bedragen were the desponsible and with driver the operaban of like on Mars. Our antasto work and the oppation that were received, life mode us work to on back to Mars to search for evidence of past kile.

Were an electrical fully model was the decorrelation of the second seco

Oney: And Mail

Make, Walawet hotzy you we loarter is precedent doop 10 fb singer on class- the same contribution print table end of the same contribution print table end of the same contribution of the same end of the same contribution of the same end of the same control of the same end of the same control of the same end of the same control of the same of sprint end of the same and the same control of the same control of the same same control of the same

A existing theory for the organ of the barry with shore organic matter possibly correct from the older data aslies for correct. Products contract of the end of the shore of the shore of the end of the shore of the shore of the end organic shore of the correct of 200 million years which, just and overdates accepted to the correct of 200 million years which, just and overdates accepted to the shore the site barry of the correct of 200 million years which is the organic training of the correct of the shore the shore of the shore shore on them to the shore of the shore the shore of the shore o bread years" on Earth, as 1 ceil Heam Bochennoste Komed and threag giving ring to 1% tild into place. The wordse of biological opportunity opported to tesen. 5 S and 3 5 billion years ago when the 1 rink appliciticated DKA Sile forms stacked have arosen on both planda. If We is a natural, emergent property of matter in Earthise environments. Them is existed on Mars.

Omnti. Why did Mars oo bed?

Moting: A CD, armouphwe is not also be in the processor of water. It forms calcum-outborner solicit that setties to coopen forcer and river basens. On control of the control patient waters have the the control patient waters have held remains them into a goal that recyclics in the atmosphere though volkanizor. The parseterce of our atmosphere and our very seaterena beamdon paties like frances. The cruat is broken our misplaise that stam into each other, some-

That terrain is in freeze-crited, vacuum storage it may have no life today, but Mare reay hold the only complete record of life's origin in our solar system 9

tense one plate gets carned under an other, causing it to melt, returning the sodiments into gases.

Because Mars is only about onch bank parts mark, we hink is han only one plate Without plate tecturics. It desers' necessite its caliboot clonde Mars stated out with a thick almosdens, but han CC₂—the quantificate octal, for least horse and its empire title tarms died. Mars has not file because it wis too small its growth was periutical when your diverses and a service title

Crest, is the search for loasts the roason we should go to Mars?

Maday, I solvecamp the objective within NASA. A density catinet letteran, something like the luner highlands, constraints and the solution of the solution of the about head heads of the lateral in the southern heatsgatave. The lateral must date back to the declining phase of heavy bombarchment, when the was forming on Earth. That there is a forming on Earth. That there is a forming on the back, but Mais may head heavy on life backy, but Mais may head the only consider letterals. of life in our solar system. On Earth, the record is erased

In a tex transport called Hebes, part before the capacity we real hysics of other method and the sector state of the sector based and in water. This capacity has probably could and everything on a hard a straying and days, a title was a good place to be the ware that causarias horn Earth come and the saged place to be 13 before years that causarias horn Earth come and the saged place to be 13 before years that causarias horn Earth come and the saged place to be 13 before years that causarias horn Earth causarias the sage horn to the sage causarias the same horn in Borne to causaria the same horne in Borne to causarias the same horne to

Wells engineerine might be preserved in the permittion of twofewirth Rosen scientifies in Rosen, Using an respective mission of the permittion of two and tw

In the next BOD years, Mars at the eny manifest pacet to look for this Moving at the speed of logit. I next at could you at the speed of logit. I next at could you an explorition of There's no rol is to see our dowth distant workid but, Marsh and men. May state at location at the go out and dig. Mars scree has flagst work men. May state at location at the go out and dig. Mars scree has flagst work in the men that is the entroged naturally in Earthles returnments precision paid face mixes than the stippedwints for More property that the is an en-

Omer, Could more than elime have evolved on Mars?

Builded corresusbuilded corresuspage. If is was mercical or Carth for over 2 bitter years—backme, Agae and their mers blacks borgen ness stouthed inal. The fast pages ness stouthed inducing sufficies to sufficient for earrors that a bitter overs, the algues had pumped car incorpt organ to earlie these sinis, and if pound not be shmosphere. Corgans as the pomement of the outment of the accord of the pometer on the sufficient for white the manual bits a column to the shmethods. The white outment of the accord of the outoutoutoutouttion to the shmethods the white outoutouttion the shmethods the shlant to terospere, and when you mix it with cargo-in that's noise that A high atmospheric oxygon loved brought enolosive growth in biological complexby, griving us whates and humana. Since Mars was habitable for only half a billion years, there was too little time for caygon to accumulate and for comroles the forms to evolve

Own: You describe Mars as hospitsble, but its not really

Makey Chyle by comparison to getting bound all new Nerus. Mars han a meet terperature of +80° C, hough in arm places in eaches 30° Favennet in the summer You'd die in recorde Migor angewant (would be les labospace because the pressure is so law free ratio of the source and the terperature instantiation and the the maccines to support the soit to pordole to third or net-sufficient have and both to the street and the street in the soit to por-

Own: is science and technology advanced enough to terration Mam?

McKay We've inscred how electeds work and shown we can modify both demonstrate and contractionally boost double the amount of CO. in our atmosobere. We've undertaken nisnetere scale engreening projects all over the type encanes driven by fusion or anitmatter" With free energy, you can do can't move a planet, import an simplephere, or spin up Venus. We've looked to make Mars hebsteble with current inchnolocar, we don't myoke fuelon-hot or cold. We know we could never change the physical properties of Ment but we using chemist James Lovolock's dea of made great into the Martan atmosphare. The proophouse effect would

The elefiterits of tim—carbon intropir, coyage hjoophorous, sullta, end most trace elements—have been delected on Mars. This is waiking in the dosent and searing a pile of nubble their (searly vaporavid teological compound) may be frazen in the easi, so we might change their states as the thng trings can use them, is to the then cland.

Orm: How specifically?

MKKy, We build on medum ecced too set. Imagine plants genetically engineers to more rise materials, make conneered for Marsan terratorming, and toogh they're not Wely to depart indithe clock—CFCs right to the chmmw, cally from the hardwar plants waking

A only one part per taken, here gave an here thermedias official. Cert the parts, the constants is pre-thouse exists, the constants is pre-thouse statutes the loader of the most ports, buildings of the statutes of the probability access and could be used for the regional systeme and loading loader probability access and could be used to the regional systeme and loading loader probability access and could be used to the regional systeme and loading loader and the regional systeme and loading loader to the regional access and provide the regional system and the time of these are a load to the regional access the time of these are a late more needs to the could be regional of the means to the could be regional of the means to be could be the regional of the means to be could be the regional of the means to be could be the regional of the means to be could be the regional of the means to be could be the system of the means to be could be the system of the means to be could be the system of the means to be could be the system of the system o

We keep pumping these gases out even as the sumight destroys some of them Eventually the OFCs build up it we produce 750,000 metric tons of ma-

Gif we can push Mars licking and screaming 20 degrees warmer, carbon doxide from the polar caps and soil will start burping out. The greenhouse starts working with us. 9

teld per yest, thrigs will get indicably watmit within 50 to 20 years. The first 10 to 20 degrees me the tardiost. But 10 to 20 degrees are the tardiost to 20 degrees watmer, CO, but 10 years and Maria Internal and possible and the tardiostation of the tardiost to 20 degrees watmer, backs statist watering with us. The tardioback statist watering with us. The tardioback statist watering with us. The tardiost plantal water more, and sawy it goes watering an effect, waterin CD, with the watering and they would flow and deware the water CD. with the out of avoid the Water would flow.

Omny Then you'd take a load of plants up there?

partial op menow MoStay-Jusz seeds. We distent with an gene because hanne han handleast, then hanne in some gasses for hop behins, tundraf for the polar regions, mesjde organsisme from northwin Sbleest like larch stees that grow on permatricist or doctus trees and dirtuits from the deset. Imagine plants genetically ongneered for Mariana terradroming, aithough hey/m ent likely to depert matdwin from the included catest sectors. on this planet

There has a model make opport Medica, A symbolic make opport Medica, A symbolic medication and allow ranks the painta and reasolution and and reasons of relegation and organization of the symbol medication and and allow reasons of relegation and organization for the symbol medication and and allow reasons of relegation and organization for the symbol medication and and allow reasons of relevance and allow reasons and and allow reasons and allow reasons

Therefis is characterized even or exist for more than a characterized even of the there Mars hardwale for human, we of need to base the planet with green inthi-CO₂ into arguin 1 woods lake 100.000 series to perincedul organic the teners to breather. But disting the CO₂ as mark wood mails the planet wery foot gapen, boocses exception and intringen activities were and excentibility of planet methods and the bits handle show the method of the planet wery foot pain. Wood have to term the CPC tooling that due of the planet wery foot the bade or and the planet were foot to be the bits handle show the bits handle of the bade or and the planet were foot pain. What have to term the CPC tooling that the or and the planet were foot to be planet.

Musipe we since of only like the test sets and make a generic of Mars. It is a since the set of the set of the example of the test of the set is an approximate in the sets of the set source because a site of of weter with personal sets of the set of the

McKay Mass will werm as the sun gets hoter, so its hydrogan turns to helium und the man molecular density goes up But it will be half a billion years or to before the temperature climits enough by itself to release the cerbon densitie million Mass

Omn: Could tensforming create a runsway groenhouse?

CONTRACTO ON PROVISE SC



ANTIMATTER

RUSSIA'S

Wedetcream were intropaid back in 1989 which the Soniell reveal approx, has apportant chaines from the city of chaines from the city of chaines relative. A second chaines relative of the chaines relative of the part strong a tube shaped part strong a

In Jenuary of 1990, Jeogram Valve, a computer scentral: regarded by many as the world's migger LPC resensedue; migger LPC resensedue; of mestings with the Soviet (hard's leading uro by the sense the solution is automation assessed to be subtained and the sense the solution of an advertised to be solution and with an ow Soviet Nami of order the societ and with the solution of an advertised to according to Valles, the most compoling adpring was the one of the source of the solution of



Chromotos of the Source alartine, 199 Valee de cribes the ca of dozens-adults as well en who report ody witness d the t cal Voronazh craf . companying robot. He so crias engineers who pooly left by the craft weighed 11 tons. While ulo, a med ber of the So cademy of Sciences attributed the mark a rocket launched from not agree. "Miguin's skeptical attitude," he sive, "is not very differ from which you would ge from our own National any of Sou Why does Val

Delayer the covers spinlings are for raral, the weight of the craft, the notes, wat in the range of estimates machined by presch coversite studying physical markings left by LPO landings on Franco And though the bengs bone no resemblishore to the lamitar, short, Holywood ships (EPOstato, thoy were similar to allerts sporting usion "ha very similar cose in Agentina in 1978."

Valer's sojourn-and his deta-have tiken telow UPOspith by supras. Some wonder how societific the Russians really arts, given that they regularly uso dousing to public information about UPO sites. "With all due respect," same Manael Serords, a professor at Western Michigan Uhwesty and extern of the Journal of Handback and participant able in terms of UPO able to terms of UPO is be viry well disoptimul to a se they pool at a set they are an able to the set they are a set to a set mission pool at the set to a set to a set and the set to a set and the set to a set and the set and the set to a set and the set and set of the set and the se

But Wake institt the Russian findings are significant, in part because of the region's weak coverup system. "With the chaos spreading over the Soviet Union," Velice explains, "I set there was gonuine information coming out from the whoeses."

Valies supporter and experimental psychologist Richard haines agrees that the French researcher's onto something real. Exclaiming the misunderstanding about Valee's work, Haines sitys, "He's a theorestoan. He doesn't claim to be a field investigator. And I think he has some way challenging ideas."

GOVERNOR AT

Everyone loved Enoch Lincoln, Manc's http: governor, post, and early advocate of owi rights. After his doubt, in tast, he was honored by a crypt enochd across from the ceptol in Augusta to enshme his remains. That was in 1442

Today, his body and Today, his body and those of time other officials placed in the cryst log years ago have desposand. "The body just haan't turned (s," rays Earle Shertloworth Jr, chrotter of the Masse Hearts Preserveson Commission in Augusta, who has known about the stretu cryst filer a decade

Shella McKenna, a resourch libranan at the Marno State Library, says

THE CASE OF ENOCH UNCOUN, THE MISSING GOVERNOR OF MAINE, PUZZLES STATE PROPERTY CUISTODIANS AND HSTORIANS AUKE

rectrifs confirm the presence of the bodies in the orypt in 1903, the year the legislature resolved to repair the some, but that is the last reference she has found. McKerna also learned that the Bueeau of Public Improvements may have done some housa-



keeping on the tomb in the 1950s, but there are no written records. "Yve checked old come-

The checked cell came try socials for the state of Marine for Landon and the form, and the never found them, " sine exponse for the them never found them, and the never form the state of the period that arrange do stroyed the bodies, "but arring would not have parted disk arrange do stroyed the bodies," but arring would not have carted away the coffee, bo. The place was desmed out"

So where are the bodier? McKerns belives the crypt's occupants must have been rebund at some point but hat the records were misted. "It's not extractedmisted. "It's not extractedmisted. "It's not extractedmisted." It's not extractedmisted of the second governor of Mane may be a mystery as well."

Patrick Huvaha

ABOMINABLE THEFT

One right and spring, admone took at hacksee to the large Conversion (ack on the large Conversion), and the large conversion (ack one of the large conversion), New missing a the selectory of the large conversion have come laten their country's legendary cranticem as the Accommode Sciences as the Accommode Accommode Sciences as the Accommode Sciences as the Accommode Sciences as the Accommode Acc

The theft was the "task, of the valley" according to Boston Himmaker David Breashears, who heard the news while passing through last May Though news proven sufference. the ac-celled Yeti parts drew flocks of Wastern tourises whose contributions provided income for the monastory

So far there are no exceeds: Twe world heat very strongy that a local person or persona multiber molved with beregneres of this ugly work, wrote Ang Rau, a Shenpa (mountain a information) and the Bine Minakayan Trust, Li a (mountain a information) and item to reasourche Loren Columan, autoro of New Shie and the Search for the Minakayan Trust, Li a Shie and the Search for the Sheng, the miscs were personal multi-bine and the Shengh, the miscs were personal multi-bine and the

"I don't think the theft will done for science," laments Coleman, "I just think someone wanted if for their collection." —Patrick Havahi



SPAIN

ing the language—barned from ruble use under Ranco-to common usace and other smooth same in Janan small countries in the world that have a strong personality. Subrá sava Vie (Catalonia) want to be one of those. An inco as we in phis to develop this parworsity we will be happy with the Spon-

The future on Search economic rigue Ribera, a busenessman who mans on autho shop in Burralana summed up the view of many poocie interverweid by Only when he commented. Political democracy is doing pref-Searches wavened travel to supramete the not paying taxes," Ribers south

During the 1960s the combination of

French cheeses and Japanese cars and daughters of the nouveburiche pare right decore a new colorful Spanish methace of berliers, estate testace de signers, and socialities burst onto the vest in Someth companies. Filternakar Pedro Almodovar's Whoman on the ed the image of a prosperous. I france

gun to guiver and shrink. Epain is she proving-at a more modent rele of of the late 1000s. But at the last hart years, pursion --- a maintaw of the error. ion vestors, a decire from more than - Asien nations. The level of vocational

54 million in 1988 and 1989. The numlags behind that of other European coult trace such as Germany with £7 pay 108 to shout 15 netroit But upetroloyment higher-as much as a fixed-and many

As January 1, 1960, the official opensorte the gains of the last lan years. bors multinational corporations, acaatthe instructors, more sixed toohry

competition of the section of the se colocy," style Eleas Facefels, who which ownwes 27 scenitic reliated technicians. This is expensive and in veito in own technology. You assure nie he saw. "one of the batch where renewals in food a closed or handled are

buckness. "We need to demonstrate to exhappy" and to convince young peop ence or technology. "Today if a bright papers a solar or anonana sola with a mays Forwards, "he doesn't take the to about getting the training. They is con-

Franco Spain has been doubling the number of university students. But now, waverped "There are too many demands on onlistence. They don't have annumb imme in die stellerenth " Source than the United States, on the most reacheviament analysis But they include

TORCH

and budget constraints flass than \$700,000 with no federal assistance) menuations man hadappen the cost its of Kompr. in an arroiting grash in 1991 By

stag and oper conches, and poorts beknessterner, bes Deck small Man differ. ence between wrouth and conte Maril owner have reflect athleter. but if much as a later to was DO

Cover: Ratal Oltanalo: page 4: Kolly Mooney, page 6, Sha Socurda page 10: Image Bank Nevosh page 14, ton Moure Still Archeve, page 14, bottom Mowe Still Archive page 14, botter: Alam Christellithe Image Bank, page 16: Bank/Germa Liakon, page 27, Kdp Saturano Accheni nane 27 bollare Don OasconTherwing Aronal: 0400 30 name 33 Savorno Press, page 34: Skip Dem'lte mage Bank; pege 35, top Dem'The Image Bank; pege 35, top Mark Romanala/The Image Bank news 35: Stenhon Dolton/Photo Re salectors, page 38, John Herry Suit when it 57boar Bassary/hars mano 35 bottom: Don Klumporthapt page 42 Max Schneider/Tre Insp Bank, pages 42–43, Kyong Yeoul KHy/ Importientk, page 48, left Mart Dealer Demma Largon gage 48, top fight. Pr Elements Lasson page 48, top hight Ht tor Morozol, page 48, bottom right liber tourt Graman Bildonisaan, name 48, http: tom left, Thomas Ernstein/Bédorberg page 49 telt R. Gallarde/Gamma D page 42 km A Control Cont Gentre Laison, page 40, fight, Poler Mercel, page 40, bottom loft, R. Galkarda/Garria Liason, page 49. botors right Mar Morriel Blockman, rona 52 Water Schmitt/Ricenterg, page 72 Gnant Rent/The Image Bank, page 73 top Mark Damon, page 73, bottom A-ex.Strumet/The Image Bark, Controllor ex.Steven/The Image Bank, Certadlo trom March 1982 clean, pixo 53 Pt



and technical training, too, has become a concern to businesses that need to compete in the world market.

"Lote of Japanese botteneses here are pleased with the skills of Spart's work toro," says Resch Dikorn, genealmanage of the Bark of Digits Barcelora office. "but now some are worued that set the sales are inclusioning, websitenal training and technically executed the sales are inclusioning, some capes, the sage, alignments comparese,"are hidding is seener to sand the Sourish for training an Japan".

The presence of Japanese and other longen investment highlights another growing boncern. In Spain, with a long heterical tradition of actilized behind at bodgets suddamly it seems high factors that will shape the ocurity's future are eministing as much from outside the ocurity of inside.

The more lique has developed memory and provide the developed memory and the second secon

But Speen doesn't have enough pow or to have neal presence or Latin Amerda, or in other regions, observes E. Asis acker Exaktans, and therefore, most of its foreign policy energy him been and is directed toward additiving to refe in the European Community

The scale (1960, when the EC imposed outlant accounts in accounts in the EC imposed outlant accounts in spain as a condexin of thereforents, in the end of the end of

Spen is one of the prenest countries in the EC, and at the Measthoft summet meeting in the Mathenfands last Deownible. Concellar fought for and wen a commitment to additional funding to help the group speed accountic divalopment to the level of the lichter EC mem-

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And you'l have up to 1,100 existing per hour according to finnin experts That's more fine you would us exercise biles, storetimbers ar invadually. Tou'l have ful and interests here meaded bases, radae gave metabolitest and itsee gave confire long in an little as 20 minutes, three times a work.

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ADDITION, DAVE ATTINUE 141 JORNETS/1 MAKE 14, UTINING, MAY 1937 CHARTENING BE ACES, CONSTRUCT AND REAL TO A CONTRACT, MAY 1937





Note: Decotors and Descramblers must not be used without sufficientshor-by your local other specification on terms Onters Accepted bots But as partie of the European occurs omen have alwayed down and newly liborated Estatom Bioc operatives are also requering ast, if's unclear just how much reconstitue asistance. Spain will have word the Cori the future and have word the Cori the future and have assisted the country will be obtain that will be country will be obtain that will be able to be assisted to future as a second to be assisted to have CO-metato the calls the "more organized" operatives, and berrises.

Sparris skilly as aft is note from boggir's to locate in Europe may depend largely on its abbity to aquative productions, and the standards around regions with the country Sparrist percepts income a shoul 78 percent of the average income of the European Contracting, and the strongen memory memory and the strongen memory memory, such as Catalons, and ponal ones such of Andalaum in the border of Particial.

The regions which are struggling econservely will certimise to koki not pail to Speak will certimise to koki not pail to so to the European Community for de velopment all targeted to poor regions that at the same time. Spanis oconomically stronger regions are oflying them selece web late read objective to Europerauch a Workpeller in Hencening scheptele for European Domeshung auf auto-anter the standy-highorigeners two subgested that the standof the Lateve in Europe and the regions of the Lateve in Europe and the regions of biological and noncompatible in algoing and the standard and euopean and noncompatible thereasesend provide standard and the standard in contenues in them.

And now more than at any time for decision, the Sparsh for the populability of a migar sease of new time. Billy of a migar sease of new time time of the sease of the sease time of the sease of the sease of the sease sease of the sease of

The prospect of an immigration boom sparks mixed reactions. Some



say that Sparis is current economy camta startact thousands of new poor oflaw unabled immigrants. Offness, recaling that numerical economics around the world approach that arons to immigrants as obligation to help offness who are oncoal company. Say that the occurrely house moreal company of the house house of the many and timote two bears proposed at transitions one of the houses turnees/ and transitions one of the house turnees/ community.

But even without a legal recorder of the assue, where physical frontiers belevant the 12 EC mators full on Jamury 1. 1983, an Algorism smogart ksig in Berooknas becomes a resident of Spann Soon the question of where the emergence transition is built and the decided in Brussels, the EC captel, and/or Branch, the EC captel, and/or Branch. The EC captel, and/or Branch. The EC captel, and/or Branch.

The permission of the second s

Bo tar ILD membership has brought. Bpain higher taxes, higher prives, not more consumer grouts, but not his woet al social services angled in most offen Europen countries. The incre propertus countries of Western Europa, heavews serve as both the model for and the means of achieving a new etcountries event and both future.

Most of the Sparish people—it last those old enough to remember perco-are rewing in a new sinte of paraonal and policial feedom and out trail identity. Yet increasingly, they agree with the miseisment of Baroshire journalist. Pewere that "there is not a table for Spain outside Europe. Therein outside sit to on"

This, then is the long and the message that Speen will propert to the word through takewise that is being projected the sage that is being projected the same that the second second takes and the same takes the same second the same second coperate means (the same second coperate remains) from 40 years of dotationary only to invol-years of dotationary only to invol-years of anywhere elso ...that in our task-through complicates, and interconnicided worlds the only white to protect takings, and the only way to protect takes of the only way to be takes of the takes of t NTERVIEW

Mekay The effect is always unstable like rolling a big bouldar along a flat apot and then downhill. At the edge obare that is too thick and hot is unlikeon doy provinci. If we just welk by and mon of sociasts him Mate, Karphy and could, it would be a serious metake to ting a correl inane! Mars of deep a

instead, we should below with small or me that is could take to hundred those enord upper its hereightern Mary if the cut-Life will die decompose and the organ torts. Aldo Leopoid, a writer on environ-



coved by E.R. Squibb & Some an



12,000 metrodropiets of water and at per

W des rok free trial affer.



with the life at all, in reasoning it we Maybe, but I say the over rockal

Ower You are the human diversion a tothis relate to Mars?

Mellar We're trans to understand the isment machines versus humans. Live di is interested in this. When point to Mars of course, it is cheaper to send machunge & remotely niloted votation

When I show pictures of the Russian drilling ng to poople at the Jet Propul nack. It takes six hands and 30 tingers es Robotics a advancing and artitical manifes and hot soo tar on one way to at oprenies-maybo on Mars or beak

Owny Wate you surprised by the pubto interest in your Nature paper of

McKey: In America, we have this collec-world with ase and our. So I'm not outprood that Amoricana are intrigued 1 eat in Janen. Perhaps the idea of oneating a garden on Mars report's to ius. They d make a good partner in

Oww Was a colleague of yours joking on Mare because they'd be willing to fi

McKay Duer many wates of antilewhiled optimity develop. To them, bennothing less then their long-term survival. The costs ment not be prohibition owne for a Markan propagy II would make sense to myssi in a noniethal envenoment imagine ivang made a gity technology and TV trum Earth Three on Mars would feel the same way actactive amarilation dis visit and the man grean lawns and trees. The ophyratis would only postation for a world with laser there other than humans Thay'd also want to terreform their plan-"This is not then exterint for some "DO



er than his mother who was devid, had here sind in the boy in years to come boy looked down the rows and concertern. The child, whose name was Orivon could. As he came to the core, and tall, and he needed a shawn and ha topo to Ankara, and he wose a king over he woon dark classes that reflected the the farming without When he mached an a charged person land to Critic, This do you wear such heavy wooi today? I what he would inhert one day, if he trad yoly hard not to be a despat tage of the planet, were a million and a different moment, and all of them putticking of the emited world.

LEVENDIS: On Wednessiay the 16th of October he chanced upon three skehoods in Doc Martinel' and charp black learterette, besting the crap out of an interaceal couple who had amenged inno the late show at the La Sale Theater in Chicago. He stood cuiety and worked. For s long while

LEVENDIS On Trunsday the 17th of October, the chanced upon three skinheads in Oco Mentens and cheap black leadership bearing the one of the output of an interrecial couple who had or cheat stopped to the to be of a 4 meters of the store of the store of the store of the control years of the store of the store of the control and the store store of the store of th

Finned to the fabric, each with the face of the planet, were a million and more timepiaces, each one the Earth at a different moment 9

using the base lives a batter, here and in the local interpret and a the second of the local and second the local and the local and based on the local and the local and based on the local and the local and local and local and the local and local house the local house the local local local house the local loc

LEVENDIS. On Friday the 18th of Oc-

black, the pools is building of Merrins's black, the pools is building of Merrins's mediaes Bart Lease to Lay, topper dimension apple to the great pool pool primer in the second second second second second second pictual and a second second second second second pictual and the table to the second second second pictual in the table the form when media the second second second second second second pictual in the table the second second second pictual in the table the second second second pictual free table second second second second data free weeks the second second second second and free mediated that the table second second

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LINVINES: On Survive the 20th of Cotables, the drove out and around insurgin the streets of Reingh and Dations, taken Countries, it is enrice van anothe englessid reminated extramation anothe englessid reminated extramatic presentation and families ordering wegat in grain misizurants (many of these abults that adouting vocal to these abults that adouting vocal of loaling their sortical that perform of loaling their sortical bries tools, and go thesk and nessed Shridy Jobs and performed the stress tools, and go thesk and nessed Shridy Jobs and sorting the stress of the stress tools.

THE DAFFODILS THAT ENTERTAIN

LEVENDIS On Monday the 21st of October having taken the side#0p he wardered through that section of New

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luture holds for your love life.



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the women's man drew the later from range the barbs striking the pugilist in ments were wronched loose, and the porolled up in his head. Fell forward so hard he smashed three of his from texts incises at the purchire. The ori med to run but the alloy was a dead and She watched as the man with the cauld barely see his face, and there had been all those killings with that Jack the Ripper in London a few years Har name was Pappy Skumik, she was fown as a people of an a signal state tory She made one dollar and soly five conits a week, low my days of tables at mote, and it was barely enough to pay for her lodigmen at Dater's Ranta Bo steal in the Tenderlan, been a week payor more and proyed that she attentions of partitionen who lived to mepip outs after they discoped them, coninnowledge that she was no longer "dohand, and started to lead her out of the actions molecter When they reached he was and how young he was and how premerally he was prossed, she of an arroked. She was extraordinatily tetradhar name and whose she hend and if stan served like in accompany him int some damer And she accepted, and he heled a carrace, and took her to our Eith Avenue in the noth section. cusual of hor But instead, all he asked ond of small pain. And she linit feet, becourse she knew what these nabolic were like, but a hundred dolars! So she saw yos, and he asked her to bere her rasement, and from was exactly one unc-

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and of mosquilo bite pain, and then he rected her with contoller, with a cool and fragrant wed of cotton batting "Would you like to sleep the milti-"My room is down the hall but I think And she was womed that he had cone with a hard pressor, but she didn't Sori withod her a pleasant slass, and lat fore though she didn't know & and with by her appearance along to get men in the streets; and would have been in tween cool shrets with hard-ombroi she staund on from day to day, for carve birth to three children, one of

LEVENDIS On Tuesday the 22nd of Ontober. he wated a plague of automako Wer II unseen the SS groops to surrendar on Chesudo, an skand off the south arthin on Linares in Spein, and a fully fire-engine on a min-mail in Clarkou la

rather Broods Hill whorp in fact, the enpinon He also mystated every radio and Meyown commercial with the white to differentiate between in a moment all the same tring, and the misuse of a matter of personal prove

OMMI SEADCHSTAKES

to particular or phone call reported. The advertise Mar 1 actuation to my level of the

the first service and a star of the DATE and the Sectory and ensures to device the law of the law of the sectory and the sector

time in adult the mission of a relations. Data discharged by conder of testes it is to very Parameterization. On of Para 111, manufacts very Ethogeneous extra solar. Data to UV With prever to the data of the behavior (Data) 100 March 100 the prepare is economic ty CMME has not been

Tathas and Paris-Match the name of the clead and potter every unnoticed Not and transitiv told in her cart words Human Oseahl and that put Jack Ruby, and how she could no longer live with the guilt aportizes. No one would even The Enquiler, not even TV Guide

LEVENDIS: On Friday the 25th of Octohar he unded the melligence of every points

UNITABLE IN Security the 28th of On-

This is a story blad AT LEAST ONE GOOD DEED & DAY EVERY SINGLE DAY

LEARNING On Sunday the 77th of Ontober, he returned to a firmity in Kalgoon in SN Automa a travest chief home in Bayonne. New Jensey, Maon years earlier. The child was no older then below the formly had any aprelation but he now meke only in a dialect of Finness, a language that had not traverser, he than made it has become nan file being heid Mid in an angemen ment in the heart of Loos. Whele not

LEARNING On Monday the 28th of On toker, shill as identified from the work and labors of the preceding day ha Vial Nam Card Eurana Y Bresso LIPAT when hand occup closers under Sen twenty-oight years warker his net-mail him to has family in Americanan. Allogica whose his wife, remained, refused to they story provided and ext conference

LEVENDIS On Tuesday the 29th of Oc-90 CMM

when he destroyed the last bits of exes of Amelia Enthant Amberra Barra Recurric Baburat and Arrity Holls Ho washed the bones and placed from in a doniau of eacly American artifacts.

LEVENDER On Wednesday the 30th of October he traveled to New Orleans Lowsense, where he weeted it a restorrant in Mataria for the former head of the Ket Klux King, new numerica for state office, to show up to meet friends. As the mail stapped out of his knousne. invesier fired a Laws rocket from the roof of the easiery. It biew up the former electoral field open, for the enlightened votors of Louisiena. Io a mile who, as a chief had senated Managal's mark, as

He gave them the name of the woman who had killed John E Kennedy, but would believe that Marino Monroe could have done the deed ?

cal accompanies a specord contention who had changed his name to avoid bedesiato swomo cabbingo fermer from Ration Plauce whether political philosophy case, and theating one's fees into the byttere haved of the northan Weste not

LEVENERS On Thursday the Statiol Oc. Dairy Lama, and closed of the mountain masses nervation land access to Tufact the land bakiw but made accessibility by air impossible. The Deixi Lama offered a referenciam to the people

typer he erifregged a convertion of ing "We must our land land offer pagciciti as we jup them what we call He' is itself a fiction. Therefore, we

nood att absolutely entitatering forunimited person, sadly lying in a limand world 3 Thry straind politity but since he socke only in Elfuscen, they

LEWINDES On Saturday the Stird of Oo the cers of the longboal that brought proached by a representative of the na two paceties, who laughed at the sity clothing the great navigator work They all ordered pizza and the man who had done the sowing mode sure spread so that canturies later he could

LEVENDIS On Pitto the 34th of Ock ber he gave all dogs the ability to rangels in Finnleds, French, Monclarit, Undu and Esperanto but al they could nort and he called it doppend

1 EMBADIE (In Example to Mit of Ocinter he was advised by the layer Ofame at the expense of the Master Paposition, and the unit was closed down and clarkness was perioded in as a med-assessment replacement. He was Levends, which is a Greek word for surmore who is full of the pleasure of here He was reasoned, with centure, his new assignment he had taken the

This has been a story litled SWAGGING ELINGDES

The methor rates, that the orderers relethat this story was indexed by a short ture of the puppings asked them not My Les West that he has been workuso on this story smore TR78, and linalunitiant honause Antest Scherherry in e pain in the author's and No official tw Jorge Lote Borons D