# MD System MD System Narrow MD System Condensed 

# Regular <br> Medium <br> Semibold <br> Bold <br> Black 

Italic
Medium Italic
Semibold Italic
Bold Italic Black Italic

Regular
Medium
Semibold
Bold
Black
Italic
Medium Italic
Semibold Italic
Bold Italic Black Italic

Regular
Medium
Semibold
Bold
Black
Italic
Medium Italic
Semibold Italic
Bold Italic
Black Italic

## Designer (450) A

72pt
Single-story $a, g$

# [1276] ALGORITHMIC! Incandescent Lighting 

SAN FRANCISCO, CALIFORNIA
Lithium-ion Battery Manufacturer 6502 Cells Produced Each Day

## M5 Southbound

72pt

# "AMSTERDAM-ZUID" Metrolijn naar De Pijp 

GROTESQUE TYPEFACES №68
Type Foundries in The Hague, ZH, NL 374-56 (International) Suppliers

## Swiss Water, 157

72pt

# INT’L DEPARTURES $\rightarrow$ 2087-B Straßenbahn 

NEW LIVE SHOW ANNOUNCED Techniques for A/B Testing (30) ISO A4 Paper Standardization

## Phœenix, Arizona

72pt

# NEW YORK SUBWAY <br> Grotesque №36 Bold 

# FILES $\rightarrow$ DOCUMENTS $\rightarrow$ A2.PSD Untitled-1 [RGB] • 250\% Zoom 510 Revolutionary New Artworks 

## Space Launch 5

72pt

# ADDITIONAL DELTA 360 Seconds Vacuum 

# MAY 5: POSTER WORKSHOP Open Studio (students welcome) Bring Materials; Slots Limited 

## 96pt Legible Forms

## Heavy Industrial 210



A SHORTFALL OF GRAVITAS
Engineer (Digital Systems)

# EA-124 LOUNGE CHAIR [ALUMINIUM] Mid-Century Modern Design Aesthetics Second-hand; Good condition; €650 

## A38, Junction 27 (N)

## WEATHER REPORT - 14:00 "Light Showers Predicted"

# PRINTING INK (SECOND FORMULA) 

 Fine Impression • 2,400 Page Coverage £356 Biologically Safe \& Non-Toxic
# 96 pt <br> <br> 'COLD-BREW' €4.- 

 <br> <br> 'COLD-BREW' €4.-}

##  <br> SCHOOL OF TYPE DESIGN (Small Basement Studio)

## 144 Hz REFRESH RATE•IPS DISPLAY

 Horizontally or vertically mounted setup 340, Information Design; 341, Layout
## Light Railway 34/A

 Survival Simulation Game [12-Mt] Tunguska Event; 1908; A.
## Marshmallow 236

72pt

## MUSEUMNACHT A'DAM Late Night Gallery Event

## 2M ‘TITAN ARUM’ INFLORESCENCE World's Largest Flowering Structure The plant's 10-year bloom cycle,

## Alternating Current 28

72pt

> CENSUS \& EXCISE OFFICES, Nerevarine; 'Moon-And-Star'

ENVIRONMENTALISM vs the OIL EXECUTIVE A New NOVEL with a CONTEMPORARY Edge Available from MAY 2023 • Price €9.95

# DRAGON \& DUNGEON 

72pt

# COPYRIGHT \& LICENSING Co. 120 gsm Archival Paper print 

# TRADEMARK ${ }^{\text {TM }}$ RULE SET [p 458] THEORY 1998: Physical Media \& the Behaviors of Ink Iron(II) Sulfate, a.k.a. "Green Vitriol" Salts 

## 's-Gravenhage, ZH, NL

72pt
Slashed zero

# ROASTERY \& COFFEE HOUSE <br> 100\% Responsibly-Sourced* 

40pt Legible forms
47 CULTURAL \& 82 LOCAL INSTITUTIONS Worldwide [Incl. 36 Countries] Organization Space Telescope (1996; Launched 2022)

## 5A: The Planet Arrakis

72pt

# SAGUARO, 38; DRY GRASS, 1 Microgramma heterophylla 

# LOW FOG OVER A CALM ATLANTIC COAST 3 Vacuum-Optimized Upper Stage Engines Structural (5) and Procedural (6) Fixes 

## 23.1; Right Ascension

72pt

## 2020's "UTAH MONOLITH" Discovered by Surveyors

# 'INTERNATIONAL TYPOGRAPHIC STYLE' Nov. 24, 1985. South Utsire Lighthouse. Myrmecophytic ${ }^{(23)}$ Plant Biology, B1 

In 1960，the 11th CGPM synthesised the results of the 12－year study into a set of 16 resolutions．The system was named the International System of Units，abbreviated SI from the French name，Le Système International d＇Unités．When Maxwell first introduced the concept of a coherent system，he identified three quantities that could be used as base units： mass，length，and time．Giorgi later identified the need for an electrical base unit，for which the unit of electric current was chosen for SI．

## 13 ／ 16 pt

The Space Launch System（abbreviated as SLS）is an American super heavy－lift expendable launch vehicle under development by NASA since 2011．As of March 2022，the first launch is scheduled for no earlier than June 2022，pending the success of a wet dress rehearsal test after the Axiom－1 Launch．${ }^{[20]}$ The SLS is a Space Shuttle－derived launch vehicle．The first stage of the rocket is powered by one central core stage and two outboard solid rocket

## 11 ／ 14 pt $+3 \%$ 。

In October 2006，LCD Soundsystem released a composition entitled＂45：33＂，as part of Nike＇s Original Run series．It was made available for download from iTunes．Despite its name，the track is actually 45 minutes and 58 seconds long－the title is a reference to vinyl speeds（33 and 45 RPM）－and was claimed to＂reward and push at good intervals of a run＂．However，it was later revealed that this was not the case，but that Murphy merely wanted the opportunity to create a long piece of music，akin to E2－E4 by

## $9.5 / 12 \mathrm{pt}+6 \%$ 。

Legible forms
In addition to the negative consequences of sleep deprivation，sleep and the intertwined circadian system have been shown to have strong regulatory effects on immunological functions affecting both innate and adaptive immunity．First，during the early slow－wave－ sleep stage，a sudden drop in blood levels of cortisol， epinephrine，and norepinephrine causes increased blood levels of the hormones leptin，pituitary growth hormone， and prolactin．These signals induce a pro－inflammatory

## 8 ／ 10 pt $+10 \%$

The first ever known artificial feedback device was a float valve，for maintaining water at a constant level，invented in 270 BC in Alexandria，Egypt．This device illustrated the principle of feedback：a low water level opens the valve，the rising water then provides feedback into the system， closing the valve when the required level is reached．This then reoccurs in a circular fashion as the water level fluctuates．Centrifugal governors were used to regulate the distance and pressure between millstones in windmills since the 17th century．In 1788，James Watt designed his first centrifugal governor following a suggestion from his

## 7 ／ 9 pt＋15\％。

## Legible forms

A nunatak（from Inuit nunataq）is the summit or ridse of a mountain that protrudes from an ice field or glacier that otherwise covers most of the mountain or ridge．They are also called glacial islands．${ }^{[2]}$ Examples are natural pyramidal peaks．When rounded by glacial action， smaller rock promontories may be referred to as rognons． The word is of Greenlandic orisigin ${ }^{[5]}$ and has been used in English since the 1870 s．The term is typically used in areas where a permanent ice sheet is present and the nunataks protrude above the sheet．${ }^{[6]}$ Nunataks present readily identifiable landmark reference points in glaciers or ice caps and are often named．While some nunataks

16 ／ 20 pt

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## 13 ／ 16 pt <br> Single－story $g$

Most NASA systems are sufficiently complex that their com－ ponents are subsystems，which must function in a coordinated way for the system to accomplish its goals．From the point of view of systems engineering，each subsystem is a system in its own right－that is，policies，requirements，objectives，and which costs are relevant are established at the next level up in the hierarchy．Spacecraft systems often have such subsystems as
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Biofouling occurs because water is a favorable environment for many life forms．Flow characteristics of recirculating cooling water systems encourage colonization by sessile organisms to use the circulating supply of food，oxygen and nutrients． Temperatures may become high enough to support thermophilic populations．Biofouling of heat exchange surfaces can reduce heat transfer rates of the cooling system；and biofouling of cooling towers can alter flow distribution to reduce evaporative cooling

## 9.5 ／ 12 pt＋6\％。

Oldstyle figures
One of the first known instances in which spatial analysis was used came from the field of epidemiology in the＂Rapport sur la marche et les effets du choléra dans Paris et le département de la Seine＂（1832）． French geographer and cartographer，Charles Picquet created a map outlining the forty－eight Districts in Paris， using halftone color gradients，to provide a visual representation for the number of reported deaths due to cholera per 1，000 inhabitants．In 1854，John Snow，an
$8 / 10$ pt＋10\％。
Double－story italic $a, g$
The player can upgrade their skills by using＂cyber－ modules＂given as rewards for completing objectives， such as searching the ship，and then spend them at devices called＂cyber－upgrade units＂to obtain enhanced skills．Operating System（ $O / S$ ）units allow one－time character upgrades to be made（e．g．permanent health enhancement）．An in－game currency called＂nanites＂may be spent on items at vending machines，including ammunition supplies and health packs．＂Quantum Bio－ Reconstruction Machines＂can be activated and re－ constitute the player for 10 nanites if they die inside the

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16 / 20 pt


#### Abstract

Saturn (9.5 AU [1.42 billion km; 880 million mi] from the Sun), distinguished by its extensive ring system, has several similarities to Jupiter, such as its atmospheric composition and magnetosphere. Although Saturn has 60\% of Jupiter's volume, it is less than a third as massive, at 95 Earth masses. Saturn is the only planet of the Solar System that is less dense than water - about 30\% less. ${ }^{[36]}$ Although Saturn's core is considerably denser than water, the average specific density of the


## 13 / 16 pt

1-127. Opening of the OXIDIZER VALVES permits oxidizer to flow to the combustion zone of the thrust chamber and also mechanically opens the sequence valves. When the SEQUENCE VALVES open, control fluid is directed to the opening port of the gas generator CONTROL VALVE. Opening of the gas generator control valve admits propellants to the gas generator COMBUSTOR where the propellants are ignited by the gas generator

## $11 / 14$ pt $+3 \%$ 。

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The latter have orbits whose periods are in a simple ratio to that of Neptune: for example, going around the Sun twice for every three times that Neptune does, or once for every two. The classical belt consists of objects having no resonance with Neptune, and extends from roughly 39.4 to 47.7 AU ( 5.89 to 7.14 billion km; 3.66 to 4.43 billion mi). Members of the classical Kuiper belt are sometimes called "cubewanos", after the first of their kind to be discovered, $1992 \mathrm{QB}_{1}$; they

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## $7 / 9$ pt $+15 \%$ 。

The engine features a two-piece thrust chamber that is tubular-walled and regeneratively cooled to the 10:1 expansion ratio plane, and double-walled and turbine gas cooled to the 16:1 expansion ratio plane; a thrust chamber mounted turbopump that has two centrifugal pumps spline-connected on a single shaft driven by a two-stage, direct-driven turbine; one-piece rigid propellant ducts that are used in pairs to direct the fuel and oxidizer to the thrust chamber; and $a$ hypergolic fluid cartridge that is used for thrust chamber ignition. The engine is within an envelope 12 feet in diameter and 16 feet long and weighs approximately 18,500 pounds

Fast inverse square root, sometimes referred to as Fast InvSqrt() or by the hexadecimal constant 0x5F3759DF, is an algorithm that estimates the reciprocal (or multiplicative inverse) of the square root of a 32-bit floating-point number x in IEEE 754 floating-point format. This operation is used in digital signal processing to normalize a vector, such as scaling it to length 1. For example, computer graphics programs use inverse square roots to compute angles of incidence

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The Braer Storm was the most intense extratropical cyclone ever recorded over the northern Atlantic Ocean. Developing as a weak frontal wave on 8 January 1993, the system moved rapidly northeast. The combination of the absorption of a second low-pressure area to its southeast, a stronger than normal sea surface temperature differential along its path, and the presence of a strong jet stream aloft led to a rapid

## 11 / 14 pt $+3 \%$ 。

As in other computer systems, RAM can be subdivided into relatively faster but more expensive static RAM (SRAM) and the slower but cheaper dynamic RAM (DRAM). When an SoC has a cache hierarchy, SRAM will usually be used to implement processor registers and cores' built-in caches whereas DRAM will be used for main memory. "Main memory" may be specific to a single processor (which can be multi-core) when the SoC has multiple processors; in this case it is distributed memory

## 9.5 / 12 pt $+6 \%$

The Physical Impossibility of Death in the Mind of Someone Living is an artwork created in 1991 by Damien Hirst, an English artist and a leading member of the "Young British Artists" (or YBA). It consists of a preserved tiger shark submerged in formaldehyde in a glass-panel display case. It was originally commissioned in 1991 by Charles Saatchi, who sold it in 2004 to Steven A. Cohen for an undisclosed amount, widely reported to have been at least \$8

8 / 10 pt $+10 \%$
Found in South Korea, it was formally described as a new species in 2014 by lichenologists André Aptroot and Kwang-Hee Moon. The type specimens were collected by the first author from Mabok-san mountain (Goheung County, South Jeolla Province) at altitudes between 200 and 500 m ( 660 and $1,640 \mathrm{ft}$ ); there, the lichen was overgrowing mosses that were growing on siliceous rock. It has a thin (less than 0.1 mm thick) mottled greyish and olive green thallus covering areas of up to about 15 cm ( 6 in ). The thallus lacks a cortex; rather, it comprises small, irregularly shaped areoles on a

## $7 / 9$ pt +15\%。

The history of the RS-25 traces back to the 1960s, when NASA's Marshall Space Flight Center and Rocketdyne were conducting a series of studies on high-pressure engines, developed from the successful $J-2$ engine used on the $s-I I$ and S -IvB upper stages of the Saturn $V$ rocket during the Apollo program. The studies were conducted under a program to upgrade the Saturn V engines, which produced a design for a $350,000 \mathrm{lbf}(1,600 \mathrm{kN})$ upper-stage engine known as $350,000 \mathrm{lbf}(1,600 \mathrm{kN})$ upper-stage engine known as
the $\mathrm{HG}-3$. As funding levels for Apollo wound down the HG-3 was cancelled as well as the upgraded $F-1$ engines already being tested. It was the design for the


#### Abstract

System 7.1.2 is the first version of the Macintosh System Software to support Apple's new PowerPC-based computers. 68k applications that had not yet been updated to run natively on these systems were emulated transparently (without the user having to intervene) by a built-in 68k processor emulator. Fat binaries, which contained the code necessary to run natively on both PowerPC and 68k systems, became common during this time. This process was similar to the


13 / 16 pt
Double-story italic $a, g$
The Sumerian archaic cuneiform script closely followed by the Egyptian hieroglyphs are generally considered the earliest writing systems, both emerging out of their ancestral proto-literate symbol systems from 3400 to 3200 BC, with earliest coherent texts from about 2600 BC. It is generally agreed that the historically earlier Sumerian writing was an independent invention; however, it is debated whether

## 11 / 14 pt $+3 \%$

Jellyfish, combjellies, and related animals have diffuse nerve nets rather than a central nervous system. In most jellyfish the nerve net is spread more or less evenly across the body; in comb jellies it is concentrated near the mouth. The nerve nets consist of sensory neurons, which pick up chemical, tactile, and visual signals; motor neurons, which can activate contractions of the body wall; and intermediate neurons, which detect patterns of activity in the sensory neurons and,

## $9.5 / 12$ pt +6\%

Oldstyle figures
As of March 2023, a total of 7,124 737NG aircraft had been ordered, of which 7,101 had been delivered, with remaining orders for two -800, and 21 -800A variants. The most-ordered variant was the 737-800, with 4,991 commercial, 191 military, and 23 corporate, or a total of 5,205 aircraft. Boeing stopped assembling commercial 737NGs in 2019 and made the final deliveries in January 2020. The 737NG is superseded by the fourth generation 737 MAX,

8 / 10 pt $+10 \%$
FIGURE 5 (foldout, next page) details the resulting management and major systems engineering products and control gates that characterize the phases in NMI 7120.4 and NHB 7120.5 . Sections 3.1 to 3.6 contain narrative descriptions of the purposes, major activities, products, and control gates of the NASA project life cycle phases. Section 3.7 provides a more concentrated discussion of the role of systems engineering in the process. Section 3.8 describes the NASA budget cycle within which program/project managers and system engineers

## $7 / 9$ pt +15\%。

Configuration verification is the process of verifying that resulting products (e.g., hardware and software items) conform to the intentions of the designers and to the standards established by preceding approved baselines, and that baseline documentation is current and accurate. Configuration verification is accomplished by two types of control gate activity: audits and technical reviews. (See Section 4.8.4 for additional information on two important examples: the Physical Configuration Audit and the Design Certification Review.) Each of these serves to review and challenge the data presented for conformance to


#### Abstract

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In October 2006, LCD Soundsystem released a composition entitled "45:33", as part of Nike's Original Run series. It was made available for download from iTunes. Despite its name, the track is actually 45 minutes and 58 seconds long - the title is a reference to vinyl speeds ( 33 and 45 RPM) - and was claimed to "reward and push at good intervals of a run". However, it was later revealed that this was not the case, but that Murphy merely wanted the opportunity to create a long piece of music, akin to E2E4 by Manuel Göttsching. LCD Soundsystem's second studio album, Sound

## 9.5 / 12 pt $+6 \%$

Legible forms
In addition to the negative consequences of sleep deprivation, sleep and the intertwined circadian system have been shown to have strong regulatory effects on immunological functions affecting both innate and adaptive immunity. First, during the early slow-wave-sleep stage, a sudden drop in blood levels of cortisol, epinephrine, and norepinephrine causes increased blood levels of the hormones leptin, pituitary growth hormone, and prolactin. These signals induce a pro-inflammatory state through the production of the pro-inflammatory cytokines

## 8 / 10 pt $+10 \%$ 。

The first ever known artificial feedback device was a float valve, for maintaining water at a constant level, invented in 270 BC in Alexandria, Egypt. This device illustrated the principle of feedback: a low water level opens the valve, the rising water then provides feedback into the system, closing the valve when the required level is reached. This then reoccurs in a circular fashion as the water level fluctuates. Centrifugal governors were used to regulate the distance and pressure between millstones in windmills since the 17 th century. In 1788 , James Watt designed his first centrifugal governor following a suggestion from his business partner Matthew Boulton, for use in the steam engines
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16 ／ 20 pt
The Interim Cryogenic Propulsion Stage（ICPS）is planned to fly on Artemis 1，2， and 3 as the upper stage of Space Launch System Block 1．It is a stretched and human－rated Delta IV 5 m （ 16 ft ）Delta Cryogenic Second Stage powered by a single RL10 engine．The first ICPS will use the RL10B－2 variant，while the second and third ICPS will use the RL10C－2 variant．Block 1 is intended to be capable of lifting $95 t$（ 93 long tons； 105 short tons）to low Earth orbit（LEO）in this configuration，including the weight of the ICPS as part of the payload．The

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Single－story $g$
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Legible forms
Biofouling occurs because water is a favorable environment for many life forms．Flow characteristics of recirculating cooling water systems encourage colonization by sessile organisms to use the circulating supply of food，oxygen and nutrients．Temperatures may become high enough to support thermophilic populations．Biofouling of heat exchange surfaces can reduce heat transfer rates of the cooling system；and biofouling of cooling towers can alter flow distribution to reduce evaporative cooling rates．Biofouling may also create differential oxygen concentrations，

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Oldstyle figures
One of the first known instances in which spatial analysis was used came from the field of epidemiology in the＂Rapport sur la marche et les effets du choléra dans Paris et le département de la Seine＂（1832）．French geographer and cartographer， Charles Picquet created a map outlining the forty－ eight Districts in Paris，using halftone color gradients，to provide a visual representation for the number of reported deaths due to cholera per 1，000 inhabitants．In 1854，John Snow，an epidemiologist and physician，was able to determine

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The player can upgrade their skills by using＂cyber－modules＂ given as rewards for completing objectives，such as searching the ship，and then spend them at devices called＂cyber－upgrade units＂to obtain enhanced skills．Operating System（O／S）units allow one－time character upgrades to be made（e．g．permanent health enhancement）．An in－game currency called＂nanites＂may be spent on items at vending machines，including ammunition supplies and health packs．＂Quantum Bio－Reconstruction Machines＂can be activated and reconstitute the player for 10 nanites if they die inside the area in which the machine resides． Otherwise，the game ends and progress must be resumed from a

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#### Abstract

Saturn (9.5 AU [1.42 billion km; 880 million mi] from the Sun), distinguished by its extensive ring system, has several similarities to Jupiter, such as its atmospheric composition and magnetosphere. Although Saturn has 60\% of Jupiter's volume, it is less than a third as massive, at 95 Earth masses. Saturn is the only planet of the Solar System that is less dense than water-about 30\% less. ${ }^{[36]}$ The rings of Saturn are made up of small ice and rock particles. ${ }^{[134]}$ Saturn has 83 confirmed satellites composed largely of ice. Two of these, Titan and


## 13 / 16 pt

1-127. Opening of the OXIDIZER VALVES permits oxidizer to flow to the combustion zone of the thrust chamber and also mechanically opens the sequence valves. When the SEQUENCE VALVES open, control fluid is directed to the opening port of the gas generator CONTROL VALVE. Opening of the gas generator control valve admits propellants to the gas generator COMBUSTOR where the propellants are ignited by the gas generator igniters. The resultant fuel-rich hot gases are directed


#### Abstract

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## 11 / 14 pt +3\%

As in other computer systems, RAM can be subdivided into relatively faster but more expensive static RAM (SRAM) and the slower but cheaper dynamic RAM (DRAM). When an SoC has a cache hierarchy, SRAM will usually be used to implement processor registers and cores' built-in caches whereas DRAM will be used for main memory. "Main memory" may be specific to a single processor (which can be multicore) when the SoC has multiple processors; in this case it is distributed memory and must be sent via intermodule communication on-

## 9.5 / 12 pt +6\%

The Physical Impossibility of Death in the Mind of Someone Living is an artwork created in 1991 by Damien Hirst, an English artist and a leading member of the "Young British Artists" (or YBA). It consists of a preserved tiger shark submerged in formaldehyde in a glass-panel display case. It was originally commissioned in 1991 by Charles Saatchi, who sold it in 2004 to Steven A. Cohen for an undisclosed amount, widely reported to have been at least $\$ 8$ million. However, the title of Don Thompson's book, The $\$ 12$ Million

8 / 10 pt $+10 \%$
Found in South Korea, it was formally described as a new species in 2014 by lichenologists André Aptroot and KwangHee Moon. The type specimens were collected by the first author from Mabok-san mountain (Goheung County, South Jeolla Province) at altitudes between 200 and 500 m ( 660 and $1,640 \mathrm{ft}$ ); there, the lichen was overgrowing mosses that were growing on siliceous rock. It has a thin (less than 0.1 mm thick) mottled greyish and olive green thallus covering areas of up to about 15 cm ( 6 in ). The thallus lacks a cortex; rather, it comprises small, irregularly shaped areoles on a somewhat gelatinous crust. The photobiont partner of the lichen is a

## $7 / 9$ pt +15\%。

The history of the $R S-25$ traces back to the 1960 s, when nASA's Marshall Space Flight Center and Rocketdyne were conducting a series of studies on high-pressure engines, developed from the successful $\mathrm{J}-2$ engine used on the s -II and s -IVB upper stages of the Saturn V rocket during the Apollo program. The studies were conducted under a program to upgrade the Saturn V engines, which produced a design for a 350,000 lbf $(1,600 \mathrm{kN})$ upper-stage engine known as the $\mathrm{HG}-3$. As funding levels for Apollo wound down e $\mathrm{G}-3$ was cancelled as well as the upgraded F -1 engine already being tested. It was the design for the $\mathrm{H} G-3$ that would form the basis for the RS-25. Meanwhile, in 1967 , the


#### Abstract

System 7.1.2 is the first version of the Macintosh System Software to support Apple's new PowerPC-based computers. 68k applications that had not yet been updated to run natively on these systems were emulated transparently (without the user having to intervene) by a built-in 68k processor emulator. Fat binaries, which contained the code necessary to run natively on both PowerPC and 68k systems, became common during this time. This process was similar to the distribution of universal binaries


## 13 / 16 pt

Double-story italic $a, g$
The Sumerian archaic cuneiform script closely followed by the Egyptian hieroglyphs are generally considered the earliest writing systems, both emerging out of their ancestral proto-literate symbol systems from 3400 to 3200 BC, with earliest coherent texts from about 2600 BC. It is generally agreed that the historically earlier Sumerian writing was an independent invention; however, it is debated whether Egyptian writing was developed completely

## $11 / 14$ pt $+3 \%$ 。

Jellyfish, comb jellies, and related animals have diffuse nerve nets rather than a central nervous system. In most jellyfish the nerve net is spread more or less evenly across the body; in comb jellies it is concentrated near the mouth. The nerve nets consist of sensory neurons, which pick up chemical, tactile, and visual signals; motor neurons, which can activate contractions of the body wall; and intermediate neurons, which detect patterns of activity in the sensory neurons and, in response, send signals to groups of motor

## 9.5 / 12 pt $+6 \%$

Oldstyle figures
As of March 2023, a total of 7,124 737NG aircraft had been ordered, of which 7,101 had been delivered, with remaining orders for two -800, and 21 -800A variants. The most-ordered variant was the 737-800, with 4,991 commercial, 191 military, and 23 corporate, or a total of 5,205 aircraft. Boeing stopped assembling commercial 737NGs in 2019 and made the final deliveries in January 2020. The 737NG is superseded by the fourth generation 737 MAX, introduced in 2017. The first NG to roll out was a 737-700,

## 8 / 10 pt $+10 \%$

FIGURE 5 (foldout, next page) details the resulting management and major systems engineering products and control gates that characterize the phases in NMI 7120.4 and NHB 7120.5. Sections 3.1 to 3.6 contain narrative descriptions of the purposes, major activities, products, and control gates of the NASA project life cycle phases. Section 3.7 provides a more concentrated discussion of the role of systems engineering in the process. Section 3.8 describes the NASA budget cycle within which program/project managers and system engineers must operate. The purpose of this activity, which is usually performed more or less

## 7 / 9 pt +15\%。

Configuration verification is the process of verifying that resulting products (e.g., hardware and software items) conform to the intentions of the designers and to the standards established by preceding approved baselines, and that baseline documentation is current and accurate. and that baseline documentation is current and accurate.
Configuration verification is accomplished by two types of Contiguration verification is accompished by two types of control gate activity: audits and technical reviews. (See Section 4.8.4 for additional information on two important examples: the Physical Conifguration Audir and the Design Certification Review.) Each of these serves to review and challenge the data presented for conformance to the previously approved baseline. Configuration accounting

In 1960, the 11th CGPM synthesised the results of the 12-year study into a set of 16 resolutions. The system was named the International System of Units, abbreviated SI from the French name, Le Système International d'Unités. When Maxwell first introduced the concept of a coherent system, he identified three quantities that could be used as base units: mass, length, and time. Giorgi later identified the need for an electrical base unit, for which the unit of electric current was chosen for SI. Another three base units (for temperature, amount of substance, and luminous intensity) were added later. The early metric systems defined a unit

## 13 / 16 pt

The Space Launch System (abbreviated as SLS) is an American super heavy-lift expendable launch vehicle under development by NASA since 2011. As of March 2022, the first launch is scheduled for no earlier than June 2022, pending the success of a wet dress rehearsal test after the Axiom-1 Launch. ${ }^{[20]}$ The SLS is a Space Shuttle-derived launch vehicle. The first stage of the rocket is powered by one central core stage and two outboard solid rocket boosters. All SLS Blocks share a common core stage design, while they differ in their upper stages and boosters. ${ }^{[37]}$
$11 / 14 \mathrm{pt}+3 \%$
In October 2006, LCD Soundsystem released a composition entitled "45:33", as part of Nike's Original Run series. It was made available for download from iTunes. Despite its name, the track is actually 45 minutes and 58 seconds long - the title is a reference to vinyl speeds (33 and 45 RPM) - and was claimed to "reward and push at good intervals of a run". However, it was later revealed that this was not the case, but that Murphy merely wanted the opportunity to create a long piece of music, akin to E2-E4 by Manuel Göttsching. LCD Soundsystem's second studio album, Sound of Silver, was released on March 20, 2007, to critical acclaim. Praise included Mixmag

## $9.5 / 12$ pt $+6 \%$

Legible forms
In addition to the negative consequences of sleep deprivation, sleep and the intertwined circadian system have been shown to have strong regulatory effects on immunological functions affecting both innate and adaptive immunity. First, during the early slow-wave-sleep stage, a sudden drop in blood levels of cortisol, epinephrine, and norepinephrine causes increased blood levels of the hormones leptin, pituitary growth hormone, and prolactin. These signals induce a pro-inflammatory state through the production of the pro-inflammatory cytokines interleukin-1, interleukin-12, TNF-alpha and IFN-gamma. These cytokines then

## $8 / 10$ pt $+10 \%$

The first ever known artificial feedback device was a float valve, for maintaining water at a constant level, invented in 270 BC in Alexandria, Esypt. This device illustrated the principle of feedback: a low water level opens the valve, the rising water then provides feedback into the system, closing the valve when the required level is reached. This then reoccurs in a circular fashion as the water level fluctuates. Centrifugal governors were used to regulate the distance and pressure between millstones in windmills since the 17th century. In 1788, James Watt designed his first centrifugal governor following a suggestion from his business partner Matthew Boulton, for use in the steam engines of their production. Early steam engines employed a purely reciprocating motion, and were used for
$7 / 9$ pt $+15 \%$
Legible forms
A nunatak (from Inuit nunataq) is the summit or ridge of a mountain that protrudes from an ice field or glacier that otherwise covers most of the mountain or ridge. They are also called glacial islands. ${ }^{[2]}$ Examples are natural pyramidal peaks. When rounded by glacial action, smaller rock promontories may be referred to as rognons. The word is of Greenlandic originn ${ }^{[5]}$ and has been used in English since the 1870 s. The term is typically used in areas where a permanent ice sheet is present and the nunataks protrude above the sheet. ${ }^{\text {(6] }}$ Nunataks present readily identifiable landmark reference points in slaciers or ice caps and are often named. While some nunataks are isolated, sometimes they form dense clusters, such as Queen Louise Land in Greenland. ${ }^{[1]}$ Nunataks are generally angular and jagged, which hampers the formation of glacial

16 / 20 pt
The Interim Cryogenic Propulsion Stage (ICPS) is planned to fly on Artemis 1, 2, and 3 as the upper stage of Space Launch System Block 1. It is a stretched and human-rated Delta IV 5m (16 ft) Delta Cryogenic Second Stage powered by a single RL10 engine. The first ICPS will use the RL10B-2 variant, while the second and third ICPS will use the RL10C-2 variant. Block 1 is intended to be capable of lifting 95 ( 93 long tons; 105 short tons) to low Earth orbit (LEO) in this configuration, including the weight of the ICPS as part of the payload. The Exploration Upper Stage (EUS) is planned to fly on Artemis 4. The EUS will complete the SLS ascent

## 13 / 16 pt

Single-story $g$
Most NASA systems are sufficiently complex that their components are subsystems, which must function in a coordinated way for the system to accomplish its goals. From the point of view of systems engineering, each subsystem is a system in its own right - that is, policies, requirements, objectives, and which costs are relevant are established at the next level up in the hierarchy. Spacecraft systems often have such subsystems as propulsion, attitude control, telecommunications, and power. In a large project, the subsystems are likely to be called

11 / 14 pt +3\%
Legible forms
Biofouling occurs because water is a favorable environment for many life forms. Flow characteristics of recirculating cooling water systems encourage colonization by sessile organisms to use the circulating supply of food, oxygen and nutrients. Temperatures may become high enough to support thermophilic populations. Biofouling of heat exchange surfaces can reduce heat transfer rates of the cooling system; and biofouling of cooling towers can alter flow distribution to reduce evaporative cooling rates. Biofouling may also create differential oxygen concentrations, increasing corrosion rates. OTC and open recirculating systems are

## 9.5 / $12 \mathrm{pt}+6 \%$ 。

Oldstyle figures
One of the first known instances in which spatial analysis was used came from the field of epidemiology in the "Rapport sur la marche et les effets du choléra dans Paris et le département de la Seine" (1832). French geographer and cartographer, Charles Picquet created a map outlining the forty-eight Districts in Paris, using halftone color gradients, to provide a visual representation for the number of reported deaths due to cholera per 1,000 inhabitants. In 1854, John Snow, an epidemiologist and physician, was able to determine the source of a cholera outbreak in London through the use of spatial analysis. After
$8 / 10 \mathrm{pt}+10 \%$ Double-story italic $a, g$

The player can upgrade their skills by using "cyber-modules" given as rewards for completing objectives, such as searching the ship, and then spend them at devices called "cyber-upgrade units" to obtain enhanced skills. Operating System ( $0 / S$ ) units allow one-time character upgrades to be made (e.g. permanent health enhancement). An in-game currency called "nanites" may be spent on items at vending machines, including ammunition supplies and health packs. "Quantum Bio-Reconstruction Machines" can be activated and reconstitute the player for 10 nanites if they die inside the area in which the machine resides. Otherwise, the game ends and progress must be resumed from a save point. The player can hack devices, such as keypads to open alternate areas and vending

## $7 / 9$ pt +15\%。

By the late 1970 s two public domain GIS systems (Moss and GRASS Gis) were in development, and by the early 1980 s, was Computing (later Intergraph) along with Bentley Systems Incorporated for the CAD platform, Environmental Systems Research Institute (ESRI), caris (Computer Aided Resource Information System), and ERDAS (Earth Resource Data Analysis System) emerged as commercial vendors of Gis software, successfully incorporating many of the cals features, combining the first generation approach to separation of spatial and attribute information with a second generation approach to organizing attribute data into databasse structures. In 1986, Mapping Display and Analysis System (MIDAS), the first desktop Gis product was released for the doS operating system. This was renamed in 1990 to Maplnfo for


#### Abstract

Saturn（9．5 AU［1．42 billion km； 880 million mi］from the Sun），distinguished by its extensive ring system，has several similarities to Jupiter，such as its atmospheric composition and magnetosphere．Although Saturn has 60\％of Jupiter＇s volume，it is less than a third as massive，at 95 Earth masses．Saturn is the only planet of the Solar System that is less dense than water－about $30 \%$ less．${ }^{[36]}$ The rings of Saturn are made up of small ice and rock particles．${ }^{[134]}$ Saturn has 83 confirmed satellites composed largely of ice．Two of these，Titan and Enceladus，show signs of geological activity；they，as well as


## 13 ／ 16 pt

1－127．Opening of the OXIDIZER VALVES permits oxidizer to flow to the combustion zone of the thrust chamber and also mechanically opens the sequence valves． When the SEQUENCE VALVES open，control fluid is directed to the opening port of the gas generator CONTROL VALVE．Opening of the gas generator control valve admits propellants to the gas generator COMBUSTOR where the propellants are ignited by the gas generator igniters．The resultant fuel－rich hot gases are directed through the TURBINE and the thrust chamber EXHAUST MANIFOLD to the

## 11 ／ 14 pt＋3\％。

Frutiger（with Howard＇Bud＇Kettler）adapted Univers for the IBM Selectric Composer in the 1960s．This was an ultra－premium electric＇golfball＇typewriter system，intended to be used for producing high－quality office documents or copy to be photographically enlarged for small－scale printing projects．Unlike most typewriters，the Composer produced proportional type，rather than monospaced letters．Ultimately the system proved a transitional product，as it was displaced by cheaper phototypesetting，and then in the 1980s by word processors and general－ purpose computers．The release was somewhat compromised due having to be

## 9.5 ／ $12 \mathrm{pt}+6 \%$ 。

The latter have orbits whose periods are in a simple ratio to that of Neptune：for example，going around the Sun twice for every three times that Neptune does，or once for every two．The classical belt consists of objects having no resonance with Neptune，and extends from roughly 39.4 to 47.7 AU （ 5.89 to 7.14 billion km ； 3.66 to 4.43 billion mi）．Members of the classical Kuiper belt are sometimes called＂cubewanos＂，after the first of their kind to be discovered， $1992 \mathrm{QB}_{1}$ ；they are still in near primordial，low－eccentricity orbits． The dwarf planet Pluto（with an average orbit of 39 Au［ 5.8 billion

## $8 / 10$ pt＋10\％。

wPs represents objects such as disks，folders，files，program objects， and printers using the System Object Model（SOM），which allows code to be shared among applications，possibly written in different program－ ming languages．A distributed version called DSOM allowed objects on different computers to communicate．DSOM is based on CORBA．The object oriented aspect of SOM is similar to，and a direct competitor to， Microsoft＇s Component Object Model，though it is implemented in a radically different manner；for instance，one of the most notable differences between SOM and COM is SOM＇s support for inheritance （one of the most fundamental concepts of 00 programming）－com does not have such support．SOM and DSOM are no longer being
$7 / 9 \mathrm{pt}+15 \%$
The engine features a two－piece thrust chamber that is tubular－ walled and regeneratively cooled to the 10：1 expansion ratio plane， and double－walled and turbine gas cooled to the 16：1 expansion ratio plane；a thrust chamber mounted turbopump that has two centrifugal pumps spline－connected on a single shaft driven by a two－stage， direct－driven turbine；one－piece rigid propellant ducts that are used in pairs to direct the fuel and oxidizer to the thrust chamber；and $a$ hypergolic fluid cartridge that is used for thrust chamber ignition．The engine is within an envelope 12 feet in diameter and 16 feet long and weighs approximately 18,500 pounds dry．Thrust vector changes are achieved by gimbaling the entire engine．The gimbal block is located on the thrust chamber dome，and actuator attach points are provided

## 16 ／ 20 pt


#### Abstract

Fast inverse square root，sometimes referred to as Fast InvSqrt（）or by the hexadecimal constant 0x5F3759DF，is an algorithm that estimates the reciprocal（or multiplicative inverse）of the square root of a 32－bit floating－point number $x$ in IEEE 754 floating－point format．This operation is used in digital signal processing to normalize a vector，such as scaling it to length 1．For example，computer graphics programs use inverse square roots to compute angles of incidence and reflection for lighting and shading．Predated by similar video game algorithms，this one is best known for its implementation in 1999


## 13 ／ 16 pt

The Braer Storm was the most intense extratropical cyclone ever recorded over the northern Atlantic Ocean．Developing as a weak frontal wave on 8 January 1993，the system moved rapidly northeast．The combination of the absorption of a second low－pressure area to its southeast，a stronger than normal sea surface temperature differential along its path，and the presence of a strong jet stream aloft led to a rapid strengthening of the storm，with its central pressure falling to an estimated $914 \mathrm{hPa}(914.0 \mathrm{mb} ; 26.99 \mathrm{inHg})$ on 10 January．Its

## 11 ／ 14 pt＋3\％。

As in other computer systems，RAM can be subdivided into relatively faster but more expensive static RAM（SRAM）and the slower but cheaper dynamic RAM （DRAM）．When an SoC has a cache hierarchy，SRAM will usually be used to implement processor registers and cores＇built－in caches whereas DRAM will be used for main memory．＂Main memory＂may be specific to a single processor （which can be multi－core）when the SoC has multiple processors；in this case it is distributed memory and must be sent via intermodule communication on－chip to be accessed by a different processor．For further discussion of multi－

## 9.5 ／ 12 pt＋6\％

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$8 / 10$ pt＋10\％。
Found in South Korea，it was formally described as a new species in 2014 by lichenologists André Aptroot and Kwang－Hee Moon．The type specimens were collected by the first author from Mabok－san mountain（Goheung County，South Jeolla Province）at altitudes between 200 and 500 m （ 660 and $1,640 \mathrm{ft}$ ）；there，the lichen was overgrowing mosses that were growing on siliceous rock．It has a thin （less than 0.1 mm thick）mottled greyish and olive green thallus covering areas of up to about 15 cm （ 6 in ）．The thallus lacks a cortex； rather，it comprises small，irregularly shaped areoles on a somewhat gelatinous crust．The photobiont partner of the lichen is a myrmecioid green alga，which measures $2-4 \mu \mathrm{~m}$ in diameter．Ascospores of the

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## 13 / 16 pt

Double-story italic $a, g$
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## 11 / 14 pt $+3 \%$

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Oldstyle figures
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8 / 10 pt $+10 \%$
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## 7 / 9 pt +15\%

Configuration verification is the process of verifying that resulting products (e.g., hardware and software items) conform to the intentions of the designers and to the standards established by preceding approved baselines, and that baseline documentation is preceding approved basennes, ant ona riseation doc accomplished
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| English | Luyia | South Ndebele |  |  |
| Estonian | Machame | Southern Sotho |  |  |
| Faroese | Makhuwa-Meetto | Spanish |  |  |
| Filipino | Makonde | Sundanese |  |  |
| Finnish | Malagasy | Swahili |  |  |
| French | Malay | Swati |  |  |
| Friulian | Maltese | Swedish |  |  |
| Galician | Manx | Swiss German |  |  |
| Ganda | Māori | Taita |  |  |
| German | Meru | Taroko |  |  |
| Gusii | Morisyen | Teso |  |  |
| Hungarian | Nigerian Pidgin | Tsonga |  | For languages with multiple scripts or writing systems, only the |
| Icelandic | North Ndebele | Tswana |  | Latin is supported (unless noted otherwise). |
| Ido | Northern Sami | Turkish |  |  |
| Igbo | Northern Sotho | Turkmen |  | While we take care to ensure our language support is as complete |
| Inari Sami | Norwegian Bokmål | Upper Sorbian |  | and accurate possible, we can't guarantee that every regional or |
| Indonesian | Norwegian Nynorsk | Vunjo |  | language-specific variation of a glyph is included. Please get in |
| Interlingua | Nyanja | Walloon |  | touch if you need a custom version to better fit your language. |

## Styles / Instances

| Style | wdth ${ }^{1}$ | wght ${ }^{2}$ | $s l n t^{3}$ | OS/2 width/weight class |
| :---: | :---: | :---: | :---: | :---: |
| Condensed Regular | 50 | 400 | 0 | $3 / 400$ |
| Condensed Italic | 50 | 400 | -10 | $3 / 400$ |
| Condensed Medium | 50 | 500 | 0 | $3 / 500$ |
| Condensed Medium Italic | 50 | 500 | -10 | $3 / 500$ |
| Condensed Semibold | 50 | 600 | 0 | $3 / 600$ |
| Condensed Semibold Italic | 50 | 600 | -10 | $3 / 600$ |
| Condensed Bold | 50 | 700 | 0 | $3 / 700$ |
| Condensed Bold Italic | 50 | 700 | -10 | $3 / 700$ |
| Condensed Black | 50 | 800 | 0 | $3 / 800$ |
| Condensed Black Italic | 50 | 800 | -10 | $3 / 800$ |
| Narrow Regular | 75 | 400 | 0 | 4 / 400 |
| Narrow Italic | 75 | 400 | -10 | 4 / 400 |
| Narrow Medium | 75 | 500 | 0 | $4 / 500$ |
| Narrow Medium Italic | 75 | 500 | -10 | 4 / 500 |
| Narrow Semibold | 75 | 600 | 0 | 4 / 600 |
| Narrow Semibold Italic | 75 | 600 | -10 | 4 / 600 |
| Narrow Bold | 75 | 700 | 0 | $4 / 700$ |
| Narrow Bold Italic | 75 | 700 | -10 | $4 / 700$ |
| Narrow Black | 75 | 800 | 0 | 4 / 800 |
| Narrow Black Italic | 75 | 800 | -10 | 4 / 800 |
| Regular | 100 | 400 | 0 | $5 / 400$ |
| Italic | 100 | 400 | -10 | $5 / 400$ |
| Medium | 100 | 500 | 0 | $5 / 500$ |
| Medium Italic | 100 | 500 | -10 | $5 / 500$ |
| Semibold | 100 | 600 | 0 | $5 / 600$ |
| Semibold Italic | 100 | 600 | -10 | $5 / 600$ |
| Bold | 100 | 700 | 0 | $5 / 700$ |
| Bold Italic | 100 | 700 | -10 | $5 / 700$ |
| Black | 100 | 800 | 0 | $5 / 800$ |
| Black Italic | 100 | 800 | -10 | 5 / 800 |

MD System Variable (Available on request)

| Axis |  | Min | Max |
| :--- | :--- | :--- | ---: |
| Width | (wdth $)$ | 50 | 100 |
| Weight | (wght) | 400 | 800 |
| Slant | $($ slnt $)$ | 0 | -10 |

## Formats / Sizes

| Style | Filesize | Contour Type |
| :--- | :--- | :--- |
|  |  |  |
| OTF | $139-149 \mathrm{~KB}$ | Cubic (CFF) |
| WOFF2 | $44-50 \mathrm{~KB}$ | Cubic (CFF) |
| WOFF | $49-55 \mathrm{~KB}$ | Cubic (CFF) |
| Variable TTF | 306 KB | Quadratic (TTF) |
| Variable WOFF2 | 121 KB | Quadratic (TTF) |
| Variable WOFF | 144 KB | Quadratic (TTF) |

## General Information

| Credits | Designed by Rutherford Craze \& Luke Charsley |
| :--- | :--- |
|  | With thanks to Frank Grießhammer and Timothy Donaldson for <br> their feedback during the design process. |
| File Version | 2.012 |
| First Release | Feb 2020 |
| Latest Update | May 2023 <br> Licensing |
|  | MD System may be used only as permitted by the terms of the <br> Mass-Driver End User License Agreement (EULA). <br> https://mass-driver.com/licensing |

${ }^{1}$ Equivalent to the CSS font-stretch attribute.
${ }^{2}$ Equivalent to the CSS font-weight attribute.
Example usage: .italic \{ font-variation-settings: "slnt" -5;

## MD <br> Mono

## Regular Medium <br> Semibold <br> Bold Black

Italic
Medium Italic Semibold Italic
Bold Italic Black Italic

## Area-47 East

72pt

> NORTH SEA VESSEL Storms Forecast

$$
\begin{gathered}
\text { "LOS ANGELES. NOV, 2019" } \\
\text { Information Transference } \\
24 \text {-Hour Book Store ( } 8 \text { ) }
\end{gathered}
$$

## International

72pt

# NEAR-FUTURE TECH? Distinct 395 Sort 

METROPOLITAN TRANSIT: Line 0 West \& Line 0 East Museum Street Exits $\quad$ I

# 96pt <br> <br> DESIGN STUDIO 

 <br> <br> DESIGN STUDIO}

72pt
$-14 \%$ 。

## PRACTICAL FORMS Mid-Century Modern

# 'RISOGRAPH PRINT EFFECT' <br> 2785 Typographic Layouts Industrial Application 

## Authentic UI

72pt

# UTILITARIAN FEEL Typewriter Fonts 

# NETWORK 280 TECHNOLOGY Multi-Port Switch Adapter Programming Languages 

## 310 HYPERTEXT

72pt

## Single-story $a, g$

ACTIVE PROTOCOL 9 "Digital Style!"

2놀 CUPS WHITE RICE FLOUR Sharp Left Turn Ahead! Departures Lounges: Q56-60


#### Abstract

In 1960, the 11th CGPM synthesised the results of the 12 -year study into a set of 16 resolutions. The system was named the International System of Units, abbreviated SI from the French name, Le Système International d'Unités. When Maxwell first introduced the concept of a coherent system, he identified three quantities that could be used as


## 13 / 16 pt

Non-slashed Zero
The Space Launch System (abbreviated as SLS) is an American super heavy-lift expendable launch vehicle under development by NASA since 200®. As of March 2022, the first launch is scheduled for no earlier than June (2022, pending the success of a wet dress rehearsal test after the Axiom-(1) Launch. ${ }^{[20]}$ The SLS is a Space Shuttle-
$11 / 14$ pt $+3 \%$
In October 2006, LCD Soundsystem released a composition entitled "45:33", as part of Nike's Original Run series. It was made available for download from iTunes. Despite its name, the track is actually 45 minutes and 58 seconds long - the title is a reference to vinyl speeds (33 and 45 RPM ) - and was claimed to "reward and push at good intervals of a run". However, it

## $9.5 / 12$ pt +6\%

In addition to the negative consequences of sleep deprivation, sleep and the intertwined circadian system have been shown to have strong regulatory effects on immunological functions affecting both innate and adaptive immunity. First, during the early slow-wave-sleep stage, a sudden drop in blood levels of cortisol, epinephrine, and nor-
$8 / 10$ pt $+10 \%$ 。
The first ever known artificial feedback device was a float valve, for maintaining water at a constant level, invented in 270 BC in Alexandria, Egypt. This device illustrated the principle of feedback: a low water level opens the valve, the rising water then provides feedback into the system, closing the valve when the required level is reached. This then reoccurs in a circular fashion as the water level fluctuates. Centrifugal

## $7 / 9$ pt $+15 \%$ 。

A nunatak (from Inuit nunataq) is the summit or ridge of a mountain that protrudes from an ice field or glacier that otherwise covers most of the mountain or ridge. They are also called glacial islands. ${ }^{[2]}$ Examples are natural pyramidal peaks. When rounded by slacial action, smaller rock promontories may be referred to as rognons. The word is of Greenlandic origin ${ }^{[5]}$ and has been used in English since the 1870s. The term is typically used in areas where a permanent

16 / 20 pt
The Interim Cryogenic Propulsion Stage (ICPS) is planned to fly on Artemis 1, 2, and 3 as the upper stage of Space Launch System Block 1. It is a stretched and human-rated Delta IV 5m (16 ft) Delta Cryogenic Second Stage powered by a single RL10 engine. The first ICPS will use the RL10B-2 variant, while the second and third ICPS will use the RL10C-2

## 13 / 16 pt

Single-story $g$
Most NASA systems are sufficiently complex that their components are subsystems, which must function in a coordinated way for the system to accomplish its goals. From the point of view of systems engineering, each subsystem is a system in its own right - that is, policies, requirements, objectives, and which costs are
$11 / 14 \mathrm{pt}+3 \%$
Legible forms
Biofouling occurs because water is a favorable environment for many life forms. Flow characteristics of recirculating cooling water systems encourage colonization by sessile organisms to use the circulating supply of food, oxygen and nutrients. Temperatures may become high enough to support thermophilic populations. Biofouling of heat exchange surfaces can reduce

## 9.5 / 12 pt +6\%

Oldstyle figures
One of the first known instances in which spatial analysis was used came from the field of epidemiology in the "Rapport sur la marche et les effets du choléra dans Paris et le département de la Seine" (1832). French geographer and cartographer, Charles Picquet created a map outlining the forty-eight Districts in Paris, using halftone color

8 / 10 pt $+10 \%$
The player can upgrade their skills by using "cyber-modules" given as rewards for completing objectives, such as searching the ship, and then spend them at devices called "cyber-upgrade units" to obtain enhanced skills. Operating System ( $O / S$ ) units allow one-time character upgrades to be made (e.g. permanent health
enhancement). An in-game currency called "nanites" may be spent on items at vending machines, including ammunition supplies

## $7 / 9$ pt $+15 \%$ 。

By the late 1970s two public domain GIS systems (moss and Grass gis) were in development, and by the early 1980s, m\&S Computing (later Intergraph) along with Bentley Systems Incorporated for the CAD platform, Environmental Systems Research Institute (ESRI), CARIS (Computer Aided Institute (ESRI), CARIS (Computer Aided (Earth Resource Data Analysis System) emerged as commercial vendors of GIS software, successfully incorporating many of the cGIS features, combining the first

# Saturn (9.5 AU [1.42 billion km; 880 million mi] from the Sun), distinguished by its extensive ring system, has several similarities to Jupiter, such as its atmospheric composition and magnetosphere. Although Saturn has 60\% of Jupiter's volume, it is less than a third as massive, at 95 Earth masses. Saturn is the only planet of the Solar System that 

$13 / 16 \mathrm{pt}$
Small Caps
1-127. Opening of the oXIDIZER VALVES permits oxidizer to flow to the combustion zone of the thrust chamber and also mechanically opens the sequence valves. When the SEQUENCE VALVES open, control fluid is directed to the opening port of the gas generator control valve. Opening of the gas generator control valve admits

## 11 / 14 pt $+3 \%$

Frutiger (with Howard 'Bud' Kettler) adapted Univers for the IBM Selectric Composer in the 1960s. This was an ultra-premium electric 'golfball' typewriter system, intended to be used for producing high-quality office documents or copy to be photographically enlarged for small-scale printing projects. Unlike most typewriters, the Composer produced proportional

## $9.5 / 12 \mathrm{pt}+6 \%$ 。

The latter have orbits whose periods are in a simple ratio to that of Neptune: for example, going around the Sun twice for every three times that Neptune does, or once for every two. The classical belt consists of objects having no resonance with Neptune, and extends from roughly 39.4 to 47.7 AU ( 5.89 to 7.14 billion km; 3.66 to 4.43 billion mi).

8 / 10 pt $+10 \%$
WPS represents objects such as disks, folders, files, program objects, and printers using the System Object Model (SOM), which allows code to be shared among applications, possibly written in different programming languages. A distributed version called DSOM allowed objects on different computers to communicate. dSom is based on CORBA. The object oriented aspect of som is similar to, and a direct competitor to,

## $7 / 9$ pt +15\%

The engine features a two-piece thrust chamber that is tubular-walled and regeneratively cooled to the 10:1 and turbine gas cooled to the $16: 1$ expansion ratio plane; a thrust chamber expansion ratio plane; a thrust chambe mounted turbopump that has two centrifugal pumps spline-connected on a sin shaft driven by a two-stage, dire driven turbine; one-piece rigid propellant ducts that are used in pairs to direct the fuel and oxidizer to the

# Fast inverse square root，sometimes referred to as Fast InvSqrt（）or by the hexadecimal constant 0x5F3759DF，is an algorithm that estimates the reciprocal（or multiplicative inverse）of the square root of a 32－bit floating－point number $x$ in IEEE 754 floating－point format．This operation is used in digital signal processing to normalize a vector， 

## 13 ／ 16 pt

The Braer Storm was the most intense extra－ tropical cyclone ever recorded over the northern Atlantic Ocean．Developing as a weak frontal wave on 8 January 1993，the system moved rapidly northeast．The combination of the absorption of a second low－pressure area to its southeast，a stronger than normal sea surface

11／14 pt $+3 \%$ 。
As in other computer systems，RAM can be subdivided into relatively faster but more expensive static ram（Sram）and the slower but cheaper dynamic ram（dram）．When an SoC has a cache hierarchy，sRam will usually be used to implement processor registers and cores＇built－ in caches whereas dram will be used for main memory．＂Main memory＂may be specific to a

## $9.5 / 12$ pt＋6\％

The Physical Impossibility of Death in the Mind of Someone Living is an artwork created in 1991 by Damien Hirst，an English artist and a leading member of the＂Young British Artists＂（or YBA）．It consists of a preserved tiger shark submerged in formaldehyde in a glass－ panel display case．It was originally commissioned in 1991 by Charles Saatchi，

## 8 ／ 10 pt＋10\％。

Found in South Korea，it was formally described as a new species in 2014 by lichenologists André Aptroot and Kwang－Hee Moon．The type specimens were collected by the first author from Mabok－san mountain （Goheung County，South Jeolla Province）at altitudes between 200 and 500 m （ 660 and $1,640 \mathrm{ft})$ ；there，the lichen was overgrowing mosses that were growing on siliceous rock．It has a thin（less than 0.1 mm thick）mottled greyish and olive

## 7 ／ 9 pt＋15\％。

The history of the RS－25 traces back to the 1960s，when NASA＇s Marshall Space Flight Center and Rocketdyne were conducting a series of studies on high pressure engines，developed from the puccessful J－2 engine used on the s－II successful $\mathrm{J}-2$ engine used on the $\mathrm{s}-\mathrm{II}$
and s －IvB upper stages of the Saturn V rocket during the Apollo program．The rocket during the Apollo program．The
studies were conducted under a program to studies were conducted under a progr
upgrade the Saturn $V$ engines，which upgrade the Saturn V engines，which
produced a design for a 350,000 lbf produced a design for a $350,000 \mathrm{lbf}$
$(1,600 \mathrm{kN})$ upper－stage engine known as


#### Abstract

System 7.1.2 is the first version of the Macintosh System Software to support Apple's new PowerPC-based computers. 68k applications that had not yet been updated to run natively on these systems were emulated transparently (without the user having to intervene) by a built-in 68k processor emulator. Fat binaries, which contained the code necessary to run


13 / 16 pt
Double-story italic $a, g$
The Sumerian archaic cuneiform script closely followed by the Egyptian hieroglyphs are generally considered the earliest writing systems, both emerging out of their ancestral proto-literate symbol systems from 3400 to 3200 $B C$, with earliest coherent texts from about 2600 BC. It is generally agreed that the

11 / 14 pt $+3 \%$ 。
Jellyfish, comb jellies, and related animals have diffuse nerve nets rather than a central nervous system. In most jellyfish the nerve net is spread more or less evenly across the body; in comb jellies it is concentrated near the mouth. The nerve nets consist of sensory neurons, which pick up chemical, tactile, and visual signals; motor neurons, which can

## 9.5 / 12 pt +6\%

Oldstyle figures
As of March 2023, a total of 7,124 737NG aircraft had been ordered, of which 7,101 had been delivered, with remaining orders for two -800, and 21 -800A variants. The most-ordered variant was the 737-800, with 4,991 commercial, 191 military, and 23 corporate, or a total of 5,205 aircraft. Boeing stopped assembling commercial 737NGs in 2019 and

## $8 / 10$ pt +10\%

FIGURE 5 (foldout, next page) details the resulting management and major systems engineering products and control gates that characterize the phases in NMI 7120.4 and NHB 7120.5. Sections 3.1 to 3.6 contain narrative descriptions of the purposes, major activities, products, and control gates of the NASA project life cycle phases. Section 3.7 provides a more concentrated discussion of the role of systems engineering in the process.

## 7 / 9 pt +15\%。

Configuration verification is the process of verifying that resulting products (e.g., hardware and software items) conform to the intentions of the designconform to the intentions of the design-
ers and to the standards established by preceding approved baselines, and that preceding approved baselines, and that baseline documentation is current and accurate. Configuration verification is
accomplished by two types of control gate accomplished by two types of control gat
activity: audits and technical reviews. activity: audits and technical rev
(See Section 4.8 .4 for additional information on two important examples:


 ŵẅพ̄ŶŶŸỲȲȲY̌ŽŽŻ

| Lowercase Extended |  <br>  ŵẅw̄ýŷÿỳȳỹžžż |
| :---: | :---: |
| Small Caps Extended |  <br>  ŴẄW̄ŶŶŸȲȲỸY̌ŽŽŻ |
| Legible forms | てíて＇し̦も |
| Single－story $a$ | aáăâäàāqqåã Single－storgg $\quad$ gğğǵg |
| Non－Slashed Zero | 000 |
| Prebuilt fractions |  |
| Small Cap Extas | ！i？if＠\＆＠¢\＄€£¥ |
| Capital forms |  |

##  <br> ！！＇リアリId

Box Drawing

$$
\begin{aligned}
& \text { - 1-1-1-1 }
\end{aligned}
$$

| $\begin{aligned} & \text { ss01* } \\ & \text { Single-story a } \end{aligned}$ | Catch | Catch | $\begin{aligned} & \text { ss02* } \\ & \text { Single-story g } \end{aligned}$ | Image | Image |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{ss} 11^{\dagger}$ <br> Double－story a | Catch | Catch | $\begin{aligned} & \text { ss12 }{ }^{\dagger} \\ & \text { Double-story g } \end{aligned}$ | Image | LMO\＆ |
| ss03 <br> Legible Forms | Idols | Idols | ss04 <br> Circled Numbers | Set 4 | Set |
| ss05 <br> Black Circled Numbers | Set | $\text { Set } 5$ | $\begin{aligned} & \text { ss06 } \\ & \text { Non-slashed Zero } \end{aligned}$ | $V 1.0$ | V（1） 0 |
| locl Localised Forms（Romanian \＆ Moldavian；Catalan） | $3 y \quad L=L$ | $S_{y}+L \cdot L$ | frac <br> Arbitrary Fractions | $28 / 49$ | $28 / 49$ |
| smcp <br> Small Caps | Desi̇ǵn | DESIGN | ordn <br> Ordinals | $1 a 10$ | $1 a 10$ |
| $\mathrm{c} 2 \mathrm{sc}$ <br> Caps to Small Caps | $N A S A$ | $N A S A$ | onum Oldstyle Figures | $28: 49$ | $28 \cdot 49$ |
| ＊Romans \＆variable only． | ${ }^{\dagger}$ Italics \＆variable only． |  | case <br> Case－Sensitive Forms | （＠N1） | $(@ ⿴ 囗 十)$ |
| Using OpenType Featur | CSS |  | subs，sups <br> Subscript，superscript |  | $\mathrm{H}_{2} \mathrm{H}^{[5}$ |

The four－character tags（ss01，ordn，etc．）listed next to each feature above can be used with the font－feature－settings CSS property to toggle the relevant feature．For instance， font－feature－settings：＂ss02＂；
will enable the single－story $g$ stylistic set．

| Showing 120 of a total 311 supported languages. You can view the complete list at mass-driver.com/typeface/md-system. |  | Nyankole | Walser Welsh Western Frisian |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Occitan |  |  |
|  |  | Oromo |  |  |
| Afrikaans | Irish | Polish | Western Frisian Wolof |  |
| Albanian | Italian | Portuguese | Xhosa |  |
| Asu | Javanese | Romanian | Zulu |  |
| Azerbaijani | Jju | Romansh |  |  |
| Basque | Jola-Fonyi | Rombo |  |  |
| Bemba | Kabuverdianu | Rundi |  |  |
| Bena | Kalaallisut | Rwa |  |  |
| Bosnian | Kalenjin | Samburu |  |  |
| Catalan | Kamba | Sango |  |  |
| Cebuano | Kikuyu | Sangu |  |  |
| Chiga | Kinyarwanda | Sardinian |  |  |
| Colognian | Kurdish | Scottish Gaelic |  |  |
| Cornish | Latvian | Sena |  |  |
| Corsican | Lithuanian | Shambala |  |  |
| Croatian | Lojban | Shona |  |  |
| Czech | Low German | Slovak |  |  |
| Danish | Lower Sorbian | Slovenian |  |  |
| Dutch | Luo | Soga |  |  |
| Embu | Luxembourgish | Somali |  |  |
| English | Luyia | South Ndebele |  |  |
| Estonian | Machame | Southern Sotho |  |  |
| Faroese | Makhuwa-Meetto | Spanish |  |  |
| Filipino | Makonde | Sundanese |  |  |
| Finnish | Malagasy | Swahili |  |  |
| French | Malay | Swati |  |  |
| Friulian | Maltese | Swedish |  |  |
| Galician | Manx | Swiss German |  |  |
| Ganda | Māori | Taita |  |  |
| German | Meru | Taroko |  |  |
| Gusii | Morisyen | Teso |  |  |
| Hungarian | Nigerian Pidgin | Tsonga |  | For languages with multiple scripts or writing systems, only the |
| Icelandic | North Ndebele | Tswana |  | Latin is supported (unless noted otherwise). |
| Ido | Northern Sami | Turkish |  |  |
| Igbo | Northern Sotho | Turkmen |  | While we take care to ensure our language support is as complete |
| Inari Sami | Norwegian Bokmål | Upper Sorbian |  | and accurate possible, we can't guarantee that every regional or |
| Indonesian | Norwegian Nynorsk | Vunjo |  | language-specific variation of a glyph is included. Please get in |
| Interlingua | Nyanja | Walloon |  | touch if you need a custom version to better fit your language. |


| Styles / Instances |  |  |  |
| :--- | :---: | ---: | ---: |
| Style | wght $^{1}$ | slnt $^{2}$ | $0 s / 2$ width/weight class |
|  |  |  |  |
| Regular | 400 | 0 | $5 / 400$ |
| Italic | 400 | -10 | $5 / 400$ |
| Medium | 500 | 0 | $5 / 500$ |
| Medium Italic | 500 | -10 | $5 / 500$ |
| Semibold | 600 | 0 | $5 / 600$ |
| Semibold Italic | 600 | -10 | $5 / 600$ |
| Bold | 700 | 0 | $5 / 700$ |
| Bold Italic | 700 | -10 | $5 / 700$ |
| Black | 800 | 0 | $5 / 800$ |
| Black Italic | 800 | -10 | $5 / 800$ |

${ }^{1}$ Equivalent to the CSS font-weight attribute.
²Example usage: .italic \{ font-variation-settings: "slnt" -5; \}

## MD System Mono Variable (Available on request)

| Axis |  | Min |  | Max |
| :---: | :---: | :---: | :---: | :---: |
| Weight | (wght) | 400 |  | 800 |
| Slant | (slnt) | 0 |  | -10 |
| Formats / Sizes |  |  |  |  |
| Style |  | Filesize | Contour Type |  |
| OTF |  | 103-110 KB | Cubic (CFF) |  |
| WOFF2 |  | 36-39 KB | Cubic (CFF) |  |
| WOFF |  | 40-43 KB | Cubic (CFF) |  |
| Variable TTF |  | 149 KB | Quadratic (TTF) |  |
| Variable WOFF2 |  | 63 KB | Quadratic (TTF) |  |
| Variable WOFF |  | 77 KB | Quadratic (TTF) |  |

## General Information

## Credits

File Version
First Release
Licensing

Designed by Luke Charsley \& Rutherford Craze.
2.012

May 2023
MD System Mono may be used only as permitted by the terms of the Mass-Driver End User License Agreement (EULA). https://mass-driver.com/licensing

## mass-driver.com

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This specimen is intended for informational purposes only, and is
not guaranteed to be free from errors (though we did our best).

Supporting text in this document is set in MD System. Text sources: NASA Systems Engineering Handbook (1995 edition); Rocketdyne F-1 Engine Familiarization Training Manual (1967); Wikipedia.

