| PARADIC WEIGHT The core baggage, showed experient, energy experient, special mission fixed explorent, cargo, fixed as cargo, show, sock, totales passengenthrough, passengenthrough and if not in basic thinget, fixed gain, retained amounts, instance claim-shopping that fixed, etc. OPERATING WEIGHT Paginal firms passed to be retended from the excell fixing light such as an diagond cargo, passishops, operation amounts, operation amounts, operation amounts, operation amounts, operation amounts, operation for the excell fixing light such as an diagond cargo, passishops, operation amounts, operation store, operation control fixing light such as an diagond cargo, passishops, operation amounts, operation store, operation control fixing light such as an diagond cargo, passishops, operation amounts, operation store, operation to the excellent plant to the such as an experience of the fixing amounts of the such as a fixing an experience of the fixing and the fixing an experience of the fixing and the fixing an experience of the fixing and the fixing an experience of the fixing and fixing an experience of the fixing and experience of the fixing an experience of the fixing and experience of t | Pallet Area = 20 inches x 20 inches = 400 square inches 400 square inches x | LONGITUDINAL REFERENCE DATUM CREW CG |
|--|---|--|
| Caption: a diagram showing the basic components of a weight chart OCR Text: BASIC WEIGHT + OPERATING ITEMS + NON-EXPENDABLE PAYLOAD Crew, crew baggage, steward equipment, emergency equipment, special mission fixed equipment, cargo, fuel as cargo, pylons, racks, ballast, passengers/troops, passenger/troops seats (if not in Basic Weight), fixed guns, retained ammunition, retained external/droppable fuel tanks, etc OPERATING WEIGHT + EXPENDABLE PAYLOAD ITEMS Payload items planned to be released from the aircraft during flight such as air-dropped cargo, paratroo | Caption: a diagram of the different types of the soil OCR Text: a my Pallet Area = 20 inches x 20 inches = 400 square inches 1 square foot 144 square inches = 2.78 square feet 800 lbs, 2.76 square feet 400 square inches x = Floor Loading = "20 inches ee | Caption: a diagram of the aircraft's engine OCR Text: LONGITUDINAL REFERENCE DATUM CREW CG USABLE FUEL CG AMMO CG LOADED AIRCRAFT CG BASIC AIRCRAFT CG Weight (lbs) Arm(in) Moment (in-1lbs) Basic Weight 3,596 212,989 Camera 12 x -64.8 = -778 Crew 200 x 42.1 = 8,420 Usable Fuel 300 x 73.4 = 66,060 Ammo 340 x 122.2 = 41,548 5,048 328,239 Total Moment + Total Weight = Balance Arm 328,239 in-lbs = 5,048 lbs = 65.0 in |
| 12 INCH PLUG 14 22 20A 266 49 56 50 70 80 50 100 116 126 136 146 150 166 170 FUSELAGE STATION 12 INCH PLUG 15 25 20A 266 49 56 50 70 80 50 100 116 126 136 146 150 166 170 FUSELAGE STATION | Percent MAC = (Balance Arm - LEMAC) x 100 LEMAC = 611.10 inches MAC = 200.87 inches (Balance Arm - 611.10) | |
| Caption: the diagram shows the different types of the aircraft OCR Text: Lo <> C—O rit 9 10 20 30 40 80 60 70 80 90 100 110 120 130 140 150 160 170 180 FUSELAGE STATION - BALANCE ARM 12 INCH PLUG 0 19 20 30A 308 40 S60 60 70 80 90 100 110 120 130 140 150 160 170 FUSELAGE STATION tt 0 10 20 30 40 50 60 70 80 0 100 110 120 130 140 180 160 170 180 BALANCE ARM | Caption: the diagram shows the number of different types of the different OCR Text: <r (balance="" (inches)="" -="" 10="" 100="" 100<="" 190="" 20="" 30="" 40="" 50="" 60="" 600="" 611.10)="" 650="" 70="" 700="" 750="" 80="" 800="" 90="" _="" arm="" balance="" e="" inches="" lemac="611.10" lemac)="" mac="MAC" oo="" percent="" td="" x="" °=""><td>Caption: the antenna is connected to the antenna OCR Text:</td></r> | Caption: the antenna is connected to the antenna OCR Text: |
| 1. Accessory Kil Assembly 2. Ring Adapter Assembly 3. Plug Adapter 4. Spherical Adapter 5. Allen Wrench 10. Indicator Assembly 11. Power Supply Assembly 12. Extension Cable Assembly 13. Cable Assembly 14. Battery Cable Assembly 15. Cell Assembly 15. Cell Assembly 15. Cell Assembly | | 7.0 6.9 6.8 6.7 6.6 6.5 6.4 6.3 6.2 6.1 6.0 5.9 5.8 5.7 5.6 5.5 |
| Caption: the parts of a car engine diagram OCR Text: 1. Accessory Kit Assembly 2, Ring Adapter Assembly 6. Reel Assembly 7. Spare Tube Kit 8. Spare Tube Kit 9. Case Assembly 40. Indicator Assembly 4. Spherical Adapter '11. Power Supply Assembly 12. Extension Cable Assembly 18. Cable Assembly 14, Battery Cable Assembly 45. Cell Assembly. | Caption: a drawing of a sewing machine OCR Text: | Caption: a drawing of a thermometer with a line of measurement OCR Text: FUEL DENSITY READ AT LOWEST POINT = 6.5 POUNDS/GALLON |
| (Pipettes and Fluid Holders) Level Protractor Chalk Line Sheel Tape Plumb Bobs Screwdrivers Colored Chalk Leveling Bar | The property of the property o | |
| Caption: a diagram of the inside of a car OCR Text: Hydrometer (Pipettes and Fluid Holders) Screwdrivers. | Caption: a diagram of the process OCR Text: 5.4.1 Prepare - Aircraft for Weighing Clean aircraft - Gather Review Chart C. and correct any. : 'TD/TCTO errors * Drain fuel tanks to trapped fuel . 'state a Remove Operati 8 and Check all - Empty -—>) reservoirs& [-» waste [> soaenlaes amg iid ceo ie eer ee i lity . of weighing facility '11 111'!1!1!'' 1 Lo Adjust Chart C cEnsure'surtabitity: " Accou | Caption: a drawing of a car with the door handle open OCR Text: |
| | | FRONT BACK |
| Caption: a drawing of a hand holding a piece of paper OCR Text: jooo00 | Caption: a hand holding a measuring ruler OCR Text: | Caption: a black and white photo of a ruler OCR Text: BACK |
| | FULCRUM | Average arm (in) = $\frac{\text{Total moment (inch pounds)}}{\text{Total weight (pounds)}}$ |
| Caption: three military helicopters are shown in a black and white image OCR Text: | Caption: a drawing of a helicopter with a diagram of the parts OCR Text: ~ eames IN] aL, on aa atiiel-t0iy | Caption: the three types of the three types of the three types of the three types OCR Text: Total moment (inch pounds) Average arm (in) = ——————————————————————————————————— |
| 135 7 PA | $(W_{SHIFT})(\Delta CG_{WS}) = (W_{TOTAL})(\Delta CG_{AC})$ | $W_{SHIFT} = weight \ of \ shifted \ item \ (pounds)$ $\Delta CG_{WS} = distance \ that \ item \ is \ shifted \ (inches)$ $W_{TOTAL} = total \ weight \ of \ aircraft \ including \ the \ shifted \ item \ (pounds)$ $\Delta CG_{AC} = change \ in \ total \ aircraft \ CG \ due \ to \ shifted \ item \ (inches)$ |
| Caption: a diagram of a plane with a propeller OCR Text: < iaiie IN + Cre eM plain) vee hy eran) ec ie a PEEL Ts | Caption: a black and white image of a wave OCR Text: (Wouter) (AC Gws) = (Wrorat)(ACGyc) | Caption: a text that reads,"""""""""""""""""""""""""""""""""""" |
| $W_{SHIFT} = \frac{(W_{TOTAL})(\Delta CG_{AC})}{\Delta CG_{WS}}$ | $\Delta CG_{WS} = \frac{(W_{TOTAL})(\Delta CG_{AC})}{W_{SHIFT}}$ | Problem: Now went to move the CD of an according 4 inches forward by shifting an windown account of weight 15 inches forward. Now much weight do you need to with 15 inches forward. Now much weight do you need to with 16 inches forward. Now much weight do you need to will be comed. **The Wadge ** whitex engint (punche) **Marrier** **Marrier** **MCCG_MCC** **ACCG_MCC** **AC |
| Caption: a diagram of the two phases of the two phases OCR Text: (Wrorat) (ACGyc) Wsuier = CG. | Caption: the equation of the two numbers OCR Text: (Wrorat) (ACG ac) ACGws = Wenirr | Caption: a diagram of a beam with a beam at the end OCR Text: Problem: 'You want to move the CG of an aircraft 0.4 inches forward by shifting an unknown amount of weight 15 inches forward. How much weight do you need to shift 15 inches forward? 6 Find Wess = ~ NCCCC uy 4 Wonipe = shifted weight (pounds) (AICCCHriyg Wasses = "ZVI OT Tiches = 533.3 1b AC Bayar sarescatmenicics camcigiacite t tal = 20,000 lb = total weight of airratt, including the shited weight ED Bro esis SNE ICI BRUNA ET 15.0 inches FWD i< — 0.3 inch (to Limit) 0 |
| Projection You went to inform the CO of an arroad CD marker forward to suiting 100 to of surgict an ordinate murities of incline forward. How many inclines forward during the color of the 100 of th | $CG_B = CG_D + \frac{(W_G)(CG_D - CG_{GW})}{W_B}$ | $W_B = \frac{(W_G)(CG_D - CG_{GW})}{(CG_B - CG_D)}$ |
| Caption: a diagram of the flow of a stream OCR Text: Problem: 'You want to move the CG of an aircraft 0.5 inches forward by shifting 500 lb of 'weight an unknown number of inches forward, How many inches forward do you need to shift the 500 lb? WW, na Aten WW eae,) (ACCC) ACG iyo = cistance that shited veight is shied (inches), Ko (19,000 lby(-0.5 inch'y known = aa = 719.0 inches Wonipe = 500 lb = shifted weight Wyotat = 1900010. = total weight of aera incucing the shite weight ACG ge = 0 nchee = change into scr C6 auoto shied weit FWD [| Caption: the number of the two elements in the same number of the two elements is the number of the OCR Text: ot W6)(CGp — CGgw) CGz = CG, B We | Caption: the diagram shows the number of the two different types of the two different types of the two types OCR Text: _ We)(CGp — CGew) 8B (CGz — CGp) |
| To had the bullance are CG_0 where temporary halled W_1 needs to be abled in order to receive the above CD to a decired faculties. Wight $g = 20000$ to $g = 20000$ to $g = 20000$ and $g = 20000$ to $g = 200000$ to $g = 20000$ | To find the temporary helded W ₀ , that needs to be added at a belief arm of CC ₀ , in order to move the secret CCC ₀ is described by $W_g = 0.0000 h$ — given served weight, so helded $CC_{0} = 0.000 h$ orders — secret orders are served CC orders and CCC orders are served CCC orders and CCC orders are served CCC orders and CCCC ₀ and CCCCC ₀ and CCCC ₀ an | $\% MAC = \frac{(Balance Arm - LEMAC) \times 100}{MAC}$ |
| Caption: the diagram shows the flow of water from the surface to the surface OCR Text: Tofind the balance arm CGp where temporary ballast Wy needs to be added in order to move the aitcraft CG to a desited location 'Where: W, = 20.0001) = gross aircraft weight, excluding ballast W,, = s00l ——temporary ballast weight, whichis not included in gross aircraft weight CGq = 259.8 inches = location of desired aircraft CG with ballast CCG - CF CG gy= 2604 nches = location of aera oo winout batast — CCC = CCOGy+ (Cea Ct) (20,000 lb)(359.8 inches - 360.4 inches) . CCCCr» = 360.0 inche | Caption: a diagram of the current current current OCR Text: Tofind the temporary ballast Hy that needs to be added at a baliast arm of CG in order to move the aircraft CG to a desired location: Where: Ww, CGy - com CGjup 2004 renee 20,000 = gross aircraft weight, excluding ballast ee ee ify = (Wy cog a= CCC gag), Sen ee ee tare, COC - CCC ya = location of aircraft CG without ballast (20,000 lb) (359.8 inches — 360.4 inches) y= 335.8inches—359.8inches 0? > CGyy= 360.4 inches CGa= 359.8 inches CGy = 335.8 inches —! Desired Aircraf | Caption: the diagram shows the number of the two different types of the two different types of the two types OCR Text: (Balance Arm — LEMAC) x 100 % MAC MAC |
| % MAC = (298.7 - 250.0) x 100 = 32.5 %MAC 150.0 | % MAC = (316.6 – 250.0) x 100 = 44.4 %MAC 150.0 | TAKEOFF CONDITION 23,875 Mom/100 Landing Gear Retract FORWARD CG CONDITION 23,875 71,175 CG = (71,175 x 100) / 23,875 298.1 inches % MAC = (298.1 - 250.0) x 100 = 32.1 %MAC 150.0 |
| Caption: a line of lines that are not parallel OCR Text: % MAC = $(298.7 - 250.0) \times 100 = 32.5 \%$ MAC. 150.0 | Caption: a diagram of the number of the two numbers OCR Text: % MAC = $(316.6 - 250.0) \times 100 = 44.4 \%$ MAC 150.0 | Caption: a table with a number of different types of the same numbers OCR Text: Weight = Mom/100 TAKEOFF CONDITION 23,875 71,325 Landing Gear Retract -150 FORWARD CG CONDITION 23,875 74,175 (71,175 x 100) /23,875 298.1 inches % MAC = (298.1 ~ 250.0) x 100 = 32.1 %MAC 150.0 |
| AFT CG CONDITION AFT CG CONDITION MINUS: Full Fuel -7,500 -17,500 PLUS: 2,000 pounds Fuel NEW AFT CG CONDITION 18,375 CG = (59,625 x 100) / 18,375 324.5 inches % MAC = (324.5 - 250.0) x 100 = 49.7 %MAC | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | AFT CG CONDITION MINUS: Ammo (expendable) NEW AFT CG CONDITION NEW AFT CG CONDITION 18,225 CG = (59,225 x 100) / 18,225 325.0 inches % MAC = (325.0 - 250.0) x 100 = 50.0 %MAC 150.0 |
| Caption: a table with the calculation of the number of the two different types of air conditioning OCR Text: Weight Mom/100 AFT CG CONDITION 23,875 71,325 MINUS Full Fuel 7,500 -17,500 PLUS 2,000 pounds Fuel 2,000 5,800 NEW AFT CG CONDITION 18,375 59,625 (59,625 x 100)/ 18,375 324.5inches % MAC = (324.5 ~ 250.0) x 100 = 49.7 %MAC 1500 | Caption: thermic and thermic of thermic OCR Text: Weight = Mom/100 FWD CG CONDITION 23,875 71,325 MINUS: Full Fuel 7,500 -17,500 PLUS: 6,000 pounds Fuel 6,000 15,000 NEW FWD CG CONDITION 22,375 68,825 % MAC = (307.6 — 250.0) x 100 = 38.4 %MAC 150.0 | Caption: a table with a number of different types of air conditioning OCR Text: Weight —Mom/100 AFT CG CONDITION 18,375 59,625 MINUS: 'Ammo (expendable) -150 -400 NEWAFTCGCONDITION 18,225 59,225 (59,225 x 100) / 18,225 325.0 inches % MAC = (325.0 — 250.0) x 100 = 50.0 %MAC. 450.0 |
| FWD CG CONDITION $\frac{\text{Weight}}{22,375}$ $\frac{\text{Mom}/100}{68,825}$ MINUS: AIM-13 (4) $\frac{-700}{21,675}$ $\frac{-2,000}{66,825}$ CG = $(66,825 \times 100) / 21,675$ 308.3 inches % MAC = $\frac{(308.3 - 250.0)}{150.0} \times 100 = 38.9$ %MAC | AFT CG CONDITION MINUS: Crew Weight Reduction NEW AFT CG CONDITION CG = (59,150 x 100) / 18,175 MAC = (325.4 - 250.0) x 100 = 50.3 %MAC 150.0 | Mail: 1987 of Michael 2000 |
| Caption: a number of protons is the number of protons in the nucleus OCR Text: Weight Mom/100 FWD CG CONDITION 22,375 68,825 MINUS: AIM-13 (4) -700 -2,000 NEW FWD CG CONDITION 21,675 66,825 ICG = (66,825 x 100) / 21,675 308.3 inches % MAC = (308.3 — 250.0) x 100 = 38.9 %MAC 150.0 | Caption: a table with the number of the followings OCR Text: Weight Mom/100 AFT CG CONDITION 18,225 59,225 MINUS: Crew Weight Reduction -50 -15 NEW AFT CG CONDITION 18,175 59,150 ICG = $(69,150\times100)/18,175325.4$ inches % MAC = $(325.4-250.0)\times100=50.3$ %MAC 150.0 | Caption: a blank sheet for a medical record OCR Text: RECORD OF WEIGHT AND FOR USE WITH T.O. 1-18-50, Form Approved NAVAIR 07-78-50, BALANCE PERSONNEL TH-S5-1 500-342-235 OMB No. 0704-0188 The pubic reporting burden for thi: collection of Information & eximated average 10 minutes per msponse, Indading the time for reviewing instrachions, saaeching extting data sources, gathering and maintaining the dats needed, ant completing and reviewing the collection of information. Send comments regarding this burdes estimate or any other aspect of this c |
| CHART A BASIC MEDIAT CHECKET BECOME MUST NUMBER OF THE CONTROL OF | AND STATE OF THE PROPERTY OF T | THE PROPERTY OF THE PROPERTY O |
| Caption: a sample of the project schedule OCR Text: a a RE RE CHART A - BASIC WEIGHT CHECKLIST RECORD. Ec a aS aera ae Soars See rece Bercc | Caption: a form of application for a job application OCR Text: FORM B FOR USE WITH: Form Approved RCRA Joint Technical Manual (TM) - Aircraft Weight snd Galsnce OME No. O7OS-0188 = aio rosin rales TO 4-18-50, NAVAIR NA 01-18-30, AND Th 35-2500-342-23 The puniic reporting burden for this collection of information is estimated to swerage 10 minutes per response, including the time for reviewing instructions, searching existing Gata sources, gethering and maintaining the date needed, and completing and reviewing the collection of information. Send comme | Caption: a sample of a invoice form OCR Text: TORRES Do om 3652 (ace aT |
| MERICANICS ACT MEDICAL First complementary actual control for company various or, survivale control required. If the complementary actual control for company various or, survivale actual region. If the complementary actual control for company various or company actual control region. If the company control or actual control cont | CHART C - BASIC WIRDERT AND BALLANCE RECORD WY JOHN SHORT STATE OF THE STATE OF TH | MATION CORRECT OF TYTE MODEL, MATION MATION OF THE STATE OF THE ST |
| Caption: sample employee evaluation form template OCR Text: VERIFICATION OF RESULTS the weighing results are within the Weighing Tolerances, no further actions require, the weighirg results ARE MOT within the Weighing Tolerances, complete the actions Blow. EFTTA VERFCATION OF WEGRING RESULTS a apps CR Weng EUCHRE TOOTS information and further intraction, verison sep Varfcaton ep Completed By act Name, Fc ame, Midas inti! 'Ghai Foo 6 aiclaons and maasrements for or hack cals fr overdve caibration. (Check cals fer correct att | Caption: a receipt form for a company OCR Text: CHART C - BASIC WEIGHT AND BALANCE RECORD AND TM-55-1500-342-23 [FOR USE WITH T.O. 1-18-50, NAVAIR 01-18-50, Form Approved OMB No. 0704-0188 lan reviewing the collection of information [The pubic reporting burden Tor is collection of ifarmation estimated t average 10 minutes par response, nding the time for rewewing structions, searing @Iting Gata Sources, gathering and maintaining the data needed, and completing 'Send cement regarding this burden estimate o any other aspect of | Caption: a sample of a receipt for a company OCR Text: MISSON DESIGN SERIES or TYPE/MODEL/SERIES SERIAL NUMBER OR BUREAU NUMBER CONSTANT 'WEIGHT 'CURRENT TOTAL CHANGE BASIC AIRCRAFT DATE ACTION? DESCRIPTION OF ARTICLE SIMPLFIED SIMPLFIED ARMOR (Y*YYYYMMDD) OR MODIFICATION WEIGHT ARM MOMENT WEIGHT MOMENT INDEX? UNITS: UNITS: UNITS: UNITS: UNITS: 1 H=Header, A=Addition, S= Chart C Review, I=Inventory, R=Rem |
| | PRO EXPENDIBLE TOURS FOR MOST FREE DAVISATION FIRST CONTROL AND THE DAVIS FOR MOST FREE DAVIS COLUMN TO THE DAVIS OF THE | SCOTA Communication of the Com |
| Caption: a sample of a invoice form OCR Text: | Caption: a sample of a receipt form OCR Text: FOR MOST FWD AND AFT CALCULATIONS [BERATING CONDITION (REF 4) WEIGHT. MOMENT 6G.UN) FWO EXPENDABLES TABLE FOR MOST FWD CALCULATION FWD EXPENDABLE TEM BAM N) WEIGHT _[WOMENTT FWD ret he Oneng Co SURTAOD FWD EXPENDABLES: RASER TO FRONT AFT EXPENDABLES TABLE FOR MOST AFT CALCULATION RET EXPENDABLE TEM, TAMU] — WelGaT —_[MONENT AFT eave oe OPIATE. 'SUNTADD AFT EXPENDABLES' (RANGFERTO FRONT] | Caption: a blank sheet for a business meeting OCR Text: OPERATING ITEMS + NON-EXPENDABLE PAYLOAD (Qverfow) LESS EXPENDABLES (Overfow) WEIGHT [OMEN WEG MOWENT [ain ee REF: ENDABLE PAYLOAD ITEMS (Overfow) Set NOMEN eee |