



*Lighten
The
Load...* TM

*on
LOADMASTERS,
Airlifters &
Taxpayers!*



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LoadmasterToolKit.com

(800)981-IDEA



***Thank
You!***



For what you do



***For inviting me back
yet again***

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LoadmasterToolKit

HOME LTK-F: Load Planning

As Presented/Demoed at:

PLA

Gathering of Loads

2022/San Diego [Slides] +
2019/Tacoma + '17/Little Rock +
'16/OKC + '14/St.Louis + '12/Dayton

Also Presented/Demoed at:

**Advanced Airlift Tactics
Training Center (AATTC)**

2019 .. '18 .. '17 .. '16 .. '15 .. '14



***Today's
Topics:***



LTK System+Service



Business Model



“Mission Brief”

You might think of
**Loadmaster
ToolKit™**
like **MS Office®**
but for **Loadmasters!**



A unified *SYSTEM* of Tools + Services, including:

- Quick, Easy, Accurate **Payload Planning & Loading:** **LTK-F**
 - + Mission Execution, Reporting, and Tracking Support
 - + Electronic Checklists, Forms, and Manuals/TOs,
 - + **Many More** Capabilities: Custom-built and COTS

... for **EVERY** Loadmaster and **EVERY** aircraft
... via a cost-effective, fully-supported **SERVICE**

LTK-F: Automated Form-F

Your mission, at a glance: * Like Form-F layout/process



WEIGHT AND BALANCE CLEARANCE FORM F - TRANSPORT										FOR USE WITH F.O. 1 (B-AL) NAVAR		Form Approved			
DATE: 07/21/2022				AIRCRAFT TYPE: C-130E				FROM: U-Span, Thailand				TO: Manila Int. Airport, RP			
MISSION: UTR1313TF				SERIAL NO: 72-1287				PILOT: My Roper				COPILOT: [blank]			
REMARKS: T/O				LANDING				ITEM				WEIGHT			
OB 14,100 - 8779				OB 11,400 - 6223				1				BASIC AIRCRAFT (Gross Chd C)			
TB 14,200 - 7482				TB 9,400 - 5221				2				CREW (4-48-20)			
AW 16,000 - 5547				20,800 - 11,444				3				CREW'S BAGGAGE C			
Pyl 5,500 - 5035								4				STEWARDS EQUIPMENT C			
								5				EMERGENCY EQUIPMENT C			
								6				EXTRA EQUIPMENT D			
								7				OPERATING WEIGHT			
								8				TAKOFF FUEL T			
								9				WATER Wt			
								10				TOTAL AIRCRAFT WEIGHT			
								11				ZERO FUEL Wt			
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LTK-F Prototype



- * **NOT (yet) certified** for live mission planning:
“Look-and-Feel” only!
- * Now: C-130E/H Hercules
 - * Plus: KC-135 and CH-47
 - * Soon: 130J, C-17 and KC-10
 - * C-5, CV-22, and many more...
- * *To learn more, and to try **LTK-F** for **free**, visit:*

LoadmasterToolKit.com



Loadmaster ToolKit

* A Modern System+Service supporting **ALL** Loadmasters

- * **LTK-F**SM (Form-F Planning) + **LTK-T**SM (Tie-Downs/Shoring)
- * **LTK-H**SM (Handling/HAZMAT) + **LTK-C**SM (Checklists) + *many more...*
...that is Usable, Affordable, Supportable, Adaptable, Universal

* **BUT** ... few others (*seem to*) Understand ... or Care!

- * Ghosts of the Past: created, fielded, but then *abandoned*
- * Aircraft Specific: therefore, *lacking critical mass*
- * “No proven *Hard-Dollar* benefit”: *no funding or urgency*
- * “... seems a good idea, *but its not my job/business...*”
- * “Little Profit Potential, so *makes little sense to invest...*”
- * The “Five NOs”: *Need, Trust, Money, Benefit, Hurry*

We **NEED**:  **Focused VOSB+User Business Model**
 **Compelling, Documented Benefits\$**

LTK Business Model

USERS = Loadmasters

- Air Force (Airlifters)
- Army (Helicopters)
- Marines + Navy + USCG
- Allied Military Services
- Other Govt (US & Allies)
- Civil Air Carriers, NGOs, others



Veteran-Owned Small Business



aka: LTC(Ret) Larry Crain

- PARTNERS (Incl Future)
- EMPLOYEES (Future)

 **COMMANDER** 

LTK Business Model

The “FIVE NOs”... Our **Response:**

- No NEED

- No TRUST

- **No MONEY**

- No BENEFIT

- No HURRY

- ✓ Loadmasters *
on LTK's Team

- ✓ **Free** Field Trial

- ✓ FFT Final Report

- ✓ Last Chance!

* and PLA?

LTK Business Model

Who Pays ...

✓ **Developer User/Customer?**
(USAF/USA/...? @HQ/Cmd/Wg...?)

for What ?

✓ **Design/Program/Test**
Field Trials? Deployment?
Support & Enhancement?

When & Where ?

Field Trials?
Deployment?
Ongoing Support?

How Much ?

Why ?

LTK Benefits

Why?

Improve
SAFETY

Extend
A/C LIFE

Quick
TURN-AROUND

**MEASURABLE
SAVINGS
(FUEL COST)**

RANGE

LTK Benefits

A Universal, Fully-supported **LTK SYSTEM+SERVICE:**

- * “Killer App” is Payload Planning/Management: **LTK-F**SM
- * Plus, LOTS More Apps: Custom, plus COTS and Web-based
- * **Improve** Safety, Turnaround, Range/Capacity, Aircraft Life, and...
- * **Fuel Cost Savings ... must SIGNIFICANTLY EXCEED** development/deployment cost, and then ongoing service fees
- * **Ideally, ZERO Up-front Cost, then PAY-per-USE Fee, fairly-allocated**



So let's talk about LTK Savings -vs- Costs



LTK: Saving Costs via Optimum Load CG

BIRDS FLY FREE



MAC DOESN'T

TO: All MAC Aircrew Members

10 Feb 76

Fuel conservation becomes history after we do it. Since you, as aircrew members, are the forces that "do" the aircraft, you normally have a greater influence on that task than support forces can exert. That's why this brochure has been compiled: to show the savings which can be directly attributable to your actions. There should never be a conflict in following flight manual procedures or in using sound judgment. But, when you have a choice, and one alternative will conserve more fuel, you are managing effectively by choosing that alternative.

I call on you to take that alternative. Be an effective manager and take pride in it. As you will see from the following pages, each aircrew member is a manager. As such, each of you can contribute to an effort that is worth millions. You may believe that just a hundred pounds of fuel is small or meaningless. But when added to that same saving by the rest of our fleet, the result is staggering, as you will see. But, the bucket will never fill if the first drop is not added. Your ability, applied on-the-spot, provides the means of realizing those millions.

So, read on, and ... manage effectively. This command is better when you make it better.

Paul E. Carlton

PAUL E. CARLTON, General, USAF
Commander

CARGO LOADING

...THIS IS GRAVY \$\$
"WHAT'S THAT YOU SAY!"
LOADS CAN'T SAVE FUEL
"OH YEAH!"

DID YOU KNOW THAT BY LOADING YOUR AIRCRAFT TO AN AFT CG POSITION (WITHIN AERODYNAMIC STABILITY LIMITS) RANGE GOES → (AS MUCH AS **2%**) OR FUEL CONSUMPTION GOES → (AS MUCH AS **2%**).

WHY: OPTIMUM CG NEGATES THE NEED FOR TRIM (WHICH IS DRAG) TO COMPENSATE FOR THE AIRCRAFT IMBALANCE. AFT CG MOVES THE CENTER OF GRAVITY OF THE AIRCRAFT CLOSER TO THE CENTER OF LIFT OF THE WING.

REMEMBER LOADS, KEEP
YOUR CG IN THE REAR!!



LTK: Saving Costs

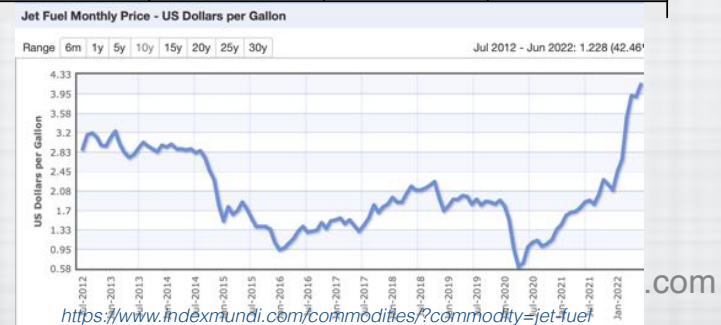
Est Savings via Optimum Load CG

Aircraft	Fuel Burn (gal/hr)*	1/2% Fuel Savings	Est. Cost Savings/hr	"Buck-a-Ton" Avg Load / FEE	Average Mission (hr)	Payback (hr)	Savings/ Mission
C-130	800	4.0	\$12.84	\$10	3	0.78	\$29
C-17	3200	16.0	\$51.36	\$30	5	0.58	\$227
C-5	3500	17.5	\$56.18	\$80	6	1.42	\$257
KC-135	1630	8.2	\$26.16	\$60	5	2.29	\$71
KC-10	2650	13.3	\$42.53	\$80	5	1.88	\$133
KC-46 (767)	1575	7.9	\$25.28	\$90	5	3.56	\$36
CH-47	340	1.7	\$5.46	\$7	2	1.28	\$4

Many Others
Aircraft, TBD

Jet-A Cost/Gal: **\$3.21**

* Ref **AFP144-4** Apr91
?Unloaded?



LTK “Mission Brief”

- * **Recruit Recently Retired Loadmasters (2-4 SMS or CMS)**
- * Allocate Recruits' shares, IDEA's investment (\$35-40k)
- * Select a Vehicle, and a Vehicle (C-130? SBIR? UP? other?)
- * Prepare & Submit “Free Field Trial” proposal (actually, \$2)
- * Recruit IQA + Code Monkeys + **Tester LMs** (1 + 2 + **3-5**)
- * Build LTK-F+T software for Field Trial (Heavily Instrumented)
- * **Execute 3-month Field Trial ... and get DATA & IDEAS!**
- * Submit/Brief “FFT Final Report”, including:
 - Measured, quantified fuel, time & cost savings
 - **PROPOSAL: IOC Roll-out plan, w/ budget & schedule**

To try the LTK-F Demo:

LoadmasterToolKit.com

or: **Form-F.com**

To contact me:



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Defiance, MO 63341



EVERYTHING YOU NEED, IN YOUR HAND, TO PLAN AND EXECUTE YOUR MILITARY AIRLIFT MISSION:

LOADMASTER Toolkit

[HOME](#)
[LTK-Fi Load Planning](#)
[Operational Benefits](#)
[Saving Fuel and Money](#)
[LTK Devices and Apps](#)
[Fee For Service](#)
[About IDEA ToolKits LLC](#)
[FAQs](#)
[Try LTK NOW!](#)






An Electronic Flight Bag (EFB) for Loadmasters

LTK™, running on your Government-issued iPad™, will provide a quick, easy-to-use Form-F app with e-filing, plus Tie-down plans, Checklists, TOs and Manuals, training for both your crew duties and PME, and many more tools from the USAF, DoD, Allies, and commercial app developers.



...providing many operational Benefits...

A Common tool for all military airlift Loadmasters. Improves flight safety. Slashes time to plan missions, and to load your aircraft. Near real-time tracking of cargo and PAX. Enhances aircrew training and management. Lowers publications and admin costs.

...installed, integrated and supported...

This innovative "System+Service" will include:

- + Loadmaster training and app installation
- + Interfacing LTK server with USAF C3 systems
- + LTK App updates, quarterly and as-needed
- + 24/7 Toll-free Help line and on-line chat
- + (Optional) LTK devices, updated regularly

...for a low per-mission service fee...

There's ZERO up-front cost to deploy on existing USAF iPads; and a fee of just \$1/ton of load when a mission is actually filed & flown. And LTK is FREE to use for training, advanced mission planning, etc.

...that pays for itself in Fuel Savings!

Because an optimally-balanced aircraft flies more efficiently, fuel cost savings alone should more than repay LTK's fee within the first hour of most flights.

Once LTK is deployed USAF- and DoD-wide, annual net savings should exceed \$20 million!

As Presented/Demoed at:

PLA

Gathering of Loads

2022/San Diego

+ 2019/Tacoma + '17Little Rock + '16OKC + '14St.Louis + '12Dayton

Also Presented/Demoed at:

Advanced Airlift Tactics Training Center (AATTC)

2019 - '18 - '17 - '16 - '15 - '14

SAWE'13/St.Louis

WANTED DEAD OR ALIVE

FORMs-F