	Aircraft	Source	
Commuter	Cessna 206/207/209/201 Stationair	Included in FAARFIELD	Link
	DHC-2 Beaver	Link	
	Piper Cherokee 6	Link	
	Piper PA-31 Navajo	Included in FAARFIELD	Link
	Cessna 208b/Grand Caravan	Link	
	Cessna 208 Caravan	Link	
Air Carrier	Boeing 737-700	Included in FAARFIELD	Link
	Boeing 737-400	Included in FAARFIELD	Link
Air Taxi	De Havilland DHC-3 Otter	Link	
	Cessna 206/207/209/210 Stationair	Included in FAARFIELD	Link
	Piper PA-31 Navajo	Included in FAARFIELD	Link
	Beech 200 Super King Air B	Included in FAARFIELD	Link
	Learjet 31A	Link	
General Aviation - Local	Cessna 180	Link	
General Aviation - Interant	Cessna 185	Link	
	Cessna 172	Link	
	Pilatus PC12	Link	
	Gulfstream G-IV	Included in FAARFIELD	Link
	Dassault Falcoln 900	Included in FAARFIELD	Link
Miliary - IT	Sikorsky MH-60 Jayhawk	Helicopter	
	Sikorsky HH-60 PAVE Hawk	Helicopter	

ADC	Runway used		2016 Departures
	Crosswind	Main	
AI	X		1464
AI	X		3
AI	X		382
BI	X		83
AII	X		98
AII	X		680
CIII		X	2
DV		X	138
?	X		55
AI	X		50
BI	X		50
BII		X	15
CI		X	15
AI	X		720
AI	X		8
AI	X		1900
AII	X		20
CII		X	40
BII		X	4
NA			50
NA			20

Gross Weight (lbs) From 2016 Traffic Mix Forecast	**Gross Weight (lbs)** From Manufacturers
2916	3000
3721	5100
2385	3400
4263	6500
6424	8750
6503	8000
131540	154500
122068	150000
8000	8000
3750	3000
6500	6500
12500	12500
15500	15500
2550	2800
3350	3350
2550	2300
10450	9921
73200	73200
45503	45500
21884	N/A
22000	N/A

Values Used for FAARFEILD and COMFAA Calculations

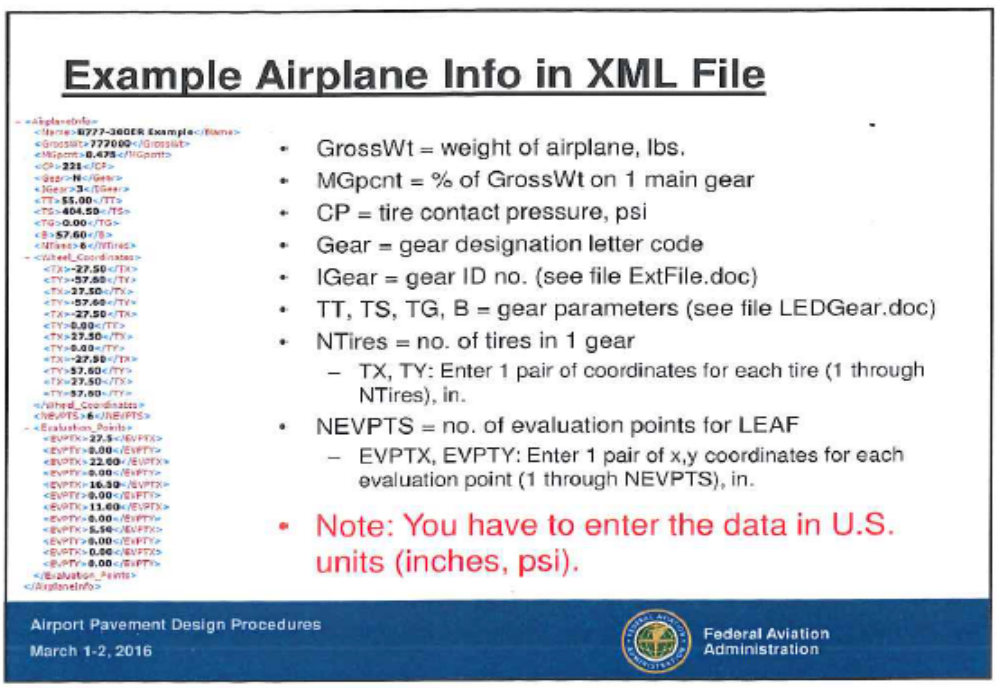
RW 2/20, RW2/20 BP, TWF, TWG	
Plane	Departures
DHC-3 Otter	55
Piper Navajo	133
DHC-2 Beaver	3
Cessna 208b Grand Caravan	98
Cessna 208 Caravan	680
Pilatus PC12	20
Cessna 172	1900
Cessna 185	8
Cessna 180	720
Piper Cherokee	382
Cessna 206/207/209/210 Stationair	1514

ATA, TWD, TWE, G
Plane
Beech Super King Air-200
Learjet 31A
Gulfstream GIV
Falcon-900
Learjet 31A
DHC-3 Otter
Piper Navajo
DHC-2 Beaver
Cessna 208b Grand Caravan
Cessna 208 Caravan
Pilatus PC12
Cessna 172
Cessna 185
Cessna 180
Piper Cherokee
Cessna 206/207/209/210 Stati

GA	RW 11/29, RW 11/29 BP, TWA, TWB, TWC, HAA	
Departures	Plane	Departures
15	Beech Super King Air-200	15
15	Learjet 31A	15
40	Gulfstream GIV	40
4	Falcon-900	4
15	Learjet 31A	15
55	DHC-3 Otter	55
133	Piper Navajo	133
3	DHC-2 Beaver	3
98	Cessna 208b Grand Caravan	98
680	Cessna 208 Caravan	680
20	Pilatus PC12	20
1900	Cessna 172	1900
8	Cessna 185	8
720	Cessna 180	720
382	Piper Cherokee	382
1514	Cessna 206/207/209/210 Stationair	1514
	737-400	138
	737-700	2

FAARFIELD INPUTS

Aircraft Name	**DHC-2 Beaver**		**Piper Ch**
Gross Weight of Aircraft, LBS	5100		34
Percent of Gross Weight on evaluation gear	47.5		47
Tire pressure, psi	35		4
Gear ID letter, military designation	B		E
Gear ID number	2		2
TT, Dual Spacing, inches	122		126
TS, Gear Track between inside wheels, inches	0		0
TG, Four-Gear spacing, inches	0		0
B Tandem spacing, inches	0		0
Number of tires on evaluation gear, Ntires	1		1
TX & TY (for NTires) in inches	0	0	0
Number of response evaluation points, NEVPTS	1		1
EVPTX & EVPTY (for NEVPTS) in inches	0	0	0



erokee 6	Cessna 208b Grand Caravan	Cessna 208 Caravan	DHC-3 Otter	Learje
00	8750	8035	8000	
'.5				
0	57	83	30	
3	B	B	B	
2	2	2	2	
5.94	140	140	134	
)	0	0	0	
)	0	0	0	
)	0	0	0	
L	1	1	1	
0	0	0	0	0	0	0
L	1	1	1	
0	0	0	0	0	0	0

Codes for Common Gear Types

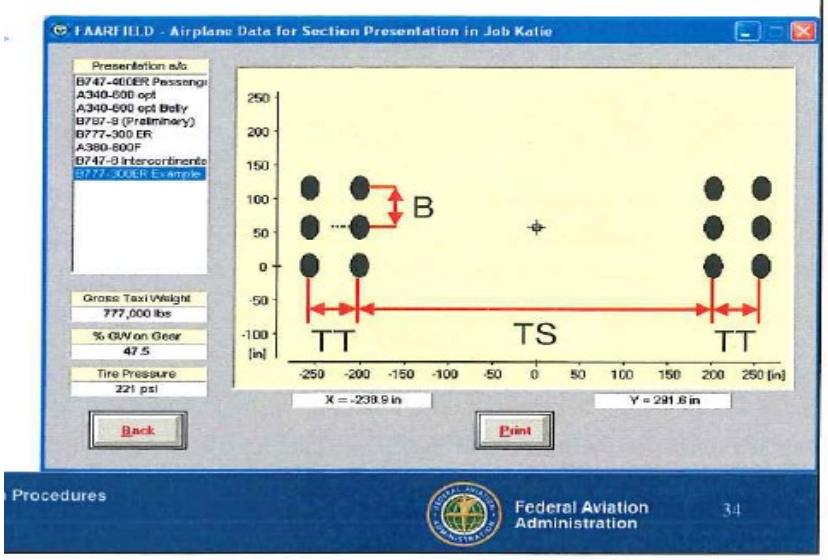
Gear Type	Example	Letter Code	ID No.
S	DC3	B	2
D	B737	D	3
2D	B767	F	3
2D/2D2	B747	J	4
3D	B777	N	3

Note: Currently only common gear types conforming to one of the letter codes can be entered in the external library. Future versions will allow complex gear geometries (e.g., A380). This feature is in development.

Example

t 31A	Cessna 180	Cessna 185	Cessna 172	Pilatus
	2800	3350	2300	9921
	28	36	29	60
	B	B	B	
	2	2	2	
	92	92	99.33	178
	0	0	0	(
	0	0	0	(
	0	0	0	(
	1	1	1	1
	0 0	0 0	0 0	0
	1	1	1	1
	0 0	0 0	0 0	0

Airplane Info in XML File



s PC12

)
)
)
L
0
L
0

DHC-2 Beaver			Piper Cherokee 6		
CG	0		CG	95.5	91.5
Main wheel	25.2		Nose wheel	16.3	16.3
Tailwheel	-244		Main wheel	109.7	109.7
Gross weight	5100		Gross weight	3400	3400
Weight on Main	4622.585		Weight on Main	2883.084	2737.473
% on Main	0.906389		% on Main	0.847966	0.805139
	0.453195			0.423983	0.40257
FAARFIELD Default	SW				
% on Main					

*These are Peter's GW on main gear calculations. When adding new aircraft to FAARFIELD or COMFAA, I ju
*There was a descrepenacy between preset COMFAA & FAARFEILD GW values. I just used the GW values li

3.12.6 Aircraft Traffic Considerations.

3.12.6.1 **Load.**

Pavements should be designed for the maximum anticipated weights of the airplanes in the fleet regularly operating on tl pavement being designed. The design procedure generally percent of the gross weight is carried by the main landing ge percent is carried by the nose gear. FAARFIELD provides recommended gross operating weights and load distribution civil and military airplanes. Using the maximum anticipate weight provides a conservative design allowing for changes use and traffic, at airports where traffic regularly operates at maximum load. Where arrivals constitute 85% or greater of operations, and for high-speed exit taxiways, the use of airc weights for design is permitted.

AC 150-5320-6F

st used 95% (47.5% in FAARFIELD) as this seemed to be the program default for general aviation aircraft
sted in the Traffic Mixture Forecast

d takeoff
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assumes 95
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manufacturer-
, for many
d takeoff
in operational
t less than
that runway's
raft landing