

Defense, Navigational, and Aerospace Electronics: 2005

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(Formerly MA334B, Selected Instruments and Related Products)

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SUMMARY OF FINDINGS. During 2005, the total value of shipments of defense, navigational

and aerospace electronics totaled \$39.0 billion, a decrease of less than 1.0 percent from the revised 2004 value of \$39.3 billion. The 2005 data includes: aeronautical, nautical, and navigational instruments, \$2.3 billion, up 5.5 percent from 2004; search, detection, navigation, and guidance systems and equipment, \$33.6 billion, a decrease of 1.0 percent from 2004; aircraft engine instruments (except flight), \$826 million, an increase of 8.4 percent from 2004; electronic trainers and simulators, teaching machines, and teaching aids, including kits, \$1.3 billion, down 14.2 percent from 2004; sighting, tracking, and fire-control equipment optical type, \$931 million, up 18.4 percent from 2004.

For general CIR information, explanation of general terms and historical note, see the appendix.

Current Industrial Reports

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Theresa Crowley, 301-763-4755.

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U S C E N S U S B U R E A U

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Table 1. Defense, Navigational, and Aerospace Electronics: 2000 to 2005
 [Millions of dollars]

Product code	Product description	2005	2004	2003	2002	2001	2000
3345111	Aeronautical, nautical, and navigational instruments.....	2,319.7	r/ 2,199.7	2,231.8	2,693.1	2,861.2	2,729.5
3345113	Search and detection, navigation and guidance systems and equipment.....	33,593.0	33,945.3	30,535.7	27,272.2	29,340.0	27,165.3
3345192	Aircraft engine instruments (except flight).....	825.9	761.6	888.2	798.8	777.6	818.7
3333197	Electronic trainers and simulators, teaching machines, and teaching aids, including kits.....	1,347.4	r/ 1,571.1	1,222.6	1,167.7	1,172.0	782.1
3333141	Sighting, tracking, and fire control equipment, optical type.....	931.0	786.1	687.7	607.9	512.1	432.5

r/Revised by 5 percent or more from previously published data.

Table 2. Value of Defense, Navigational, and Aerospace Electronics: 2005 and 2004
 [Thousands of dollars]

Product code	Product description	No. of cos.		2005		2004
3345111	Aeronautical, nautical, and navigational instruments (except aircraft engine instruments).....	65	a/	2,319,722	a/r/	2,199,666
	Flight and navigation sensors, transmitters, and displays:					
3345111106	Compasses, altimeters, and airspeed indicators.....	25	a/	422,329	a/r/	586,326
3345111111	Acceleration indicators, rate-of-climb and angle-of-attack indicators, and artificial horizon flight instruments.....	17		93,896		104,926
3345111115	Other aerospace and navigational instruments	17		895,466		709,564
3345111226	Gyroscopes, sold separately.....	10		140,766		134,799
3345111232	Airframe equipment instruments.....	19		146,633		145,966
3345111233	Other aerospace flight instruments.....	16		349,546	r/	285,433
3345111335	Nautical instruments.....	9		83,087	r/	73,847
3345111437	Parts and components.....	25	b/	187,999	r/	158,805
3345113	Search and detection systems, navigation and guidance systems and equipment.....	148	a/	33,592,954		33,945,329
3345113101	Light reconnaissance and surveillance electronic systems and equipment.....	30		4,241,558		4,072,314
3345113103	IFF equipment.....	8		443,348		372,969
3345113207	Search, detection, and acquisition radar systems and equipment airborne and missile/space.....	17		2,038,881		2,390,770
3345113212	Other search, detection, and acquisition radar systems and equipment.....	18		(D)		2,059,194
3345113318	Tracking radar systems and equipment (fire control, bombing, bombing-navigational radar, aircraft and missile tracking radar, etc.).....	18		4,296,897		(D)
3345113325	Instrumentation radar systems and equipment (altimeters, highway speed control radar, missile and space satellite tracking range radar, GCA and other precision approach radar, etc.).....	10		203,582		217,058
3345113426	Sonar search, detection, tracing and communication systems and equipment, guidance, including ASM (sonar telephone, communication equipment, depth finding, fire control, fusing, hydrophones mapping, sonabuoy, navigation, sonar fish finders, sonar range instrumentation, etc.).....	21		479,536		(D)
3345113428	Electronic checkout and monitoring, equipment for radar, sonar search, detection, and communication systems and equipment.....	13		279,991		(D)
3345113433	Specialized command and control equipment.....	12		725,840		706,338
3345113436	Other search, detection, identification, and tracking systems and equipment.....	28		1,585,612		(D)
	Electronic warfare systems and equipment:					
3345113437	Countermeasures equipment: jamming, communications and radar.....	13		2,545,825	r/	2,561,126
3345113441	Other countermeasures equipment.....	9		316,030	c/r/	248,395

3345113443	Specialized electronic and communications intelligence equipment.....	18		3,303,832		3,077,250
3345113545	Missile borne and space vehicle guidance systems.....	23		4,850,704	r/	4,839,846
3345113547	Nonmissile and space vehicle guidance systems.....	13		241,358	r/	240,204
3345113549	Electronic checkout, launching, and other missile and space support systems.....	12		405,231	a/r/	426,467
	Airborne navigational systems:					
3345113651	Radio navigation receivers and displays.....	19		856,526	a/	752,500
3345113653	Airborne integrated data systems/flight recorders.....	5	a/	253,325	r/	231,414
3345113661	Inertial navigation systems.....	8		926,662		929,283
3345113663	Proximity warning/collision avoidance equipment.....	2		(D)		537,970
3345113667	Other airborne navigational systems.....	16		1,942,669		1,645,513
3345113669	Surface (ship and ground) navigational systems.....	28	b/	410,226	a/	370,618
3345113673	Electronic checkout, monitoring, evaluation, and other electronic support equipment for navigational systems and equipment.....	25		601,360		600,400
3345113681	All other search and detection, navigation and guidance systems and equipment, not specified above.....	8		253,311		(D)
3345192	Aircraft engine instruments (except flight).....	31		825,912		761,627
3345192101	Temperature sensors, transmitters, and displays.....	20		362,634		335,777
3345192104	Pressure ratio and vacuum sensors, transmitters, controls, and displays.....	11		(D)		(D)
3345192114	All other aircraft engine instruments.....	19		324,755		325,177
3345192115	Parts and components.....	7		(D)		(D)
3333197	Electronic trainers and simulators, teaching machines, and teaching aids, including kits.....	30	a/	1,347,438	r/	1,571,062
3333141	Sighting, tracking, and fire control equipment optical type.....	35	a/	931,049		786,076
3333141101	Made from lenses, prisms, etc., produced in this plant.....	9		366,547		302,694
3333141103	Made from purchased lenses, prisms, etc.	15	b/	248,748		243,413
3333141104	Sighting and tracking laser systems.....	7		270,672	a/	206,172
3333141106	Night vision goggles and equipment.....	3		(D)		(D)
3333141109	Parts and accessories.....	14		(D)		(D)

D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data.

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of this item has been estimated. b/26 to 50 percent of this item has been estimated. c/ Over 50 percent of this item has been estimated.

Table 3. Shipments, Exports and Imports of Defense, Navigational, and Aerospace Electronics: 2005
 [Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value of f.o.b. plant)	Exports of domestic merchandise (value at port) 1/	Imports for consumption (value) 2/ 3/
3345111106	Compasses (all types).....	422,329	90,105	95,465
3345111111, 115, 226, 232, 233, 335, 437, 3345113101, 103	Search, detection, aeronautical, nautical, and navigational and guidance systems, equipment, and instruments, n.e.c. (except aircraft engine instruments).....	6,582,299	1,001,201	530,148
3345113207, 212, 318, 325	Radar systems and equipment.....	(D)	515,977	184,133
3345113651	Radio navigational aid receivers and displays.....	856,526	418,894	1,366,939
3345113426, 428, 433, 436, 437, 441, 443, 545, 547, 549, 653, 661, 663, 669, 673, 681	Sonar search, detection, tracking, and communication systems and equipment, including ASW (sonar telephone, communication equipment, depth finding, fire control, fusing guidance, hydrophones, mapping, sonabuoys, navigation, sonar fish finders, sonar finders, sonar range instrumentation, and other).....	(D)	89,874	223,998
3333141	Sighting, tracking, and fire control equipment, optical type.....	931,049	59,636	66,779

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.

1/Source: Census Bureau report, EM 545, "U.S. Exports."

2/Source: Census Bureau report, IM 145, "U.S. Imports for Consumption."

3/Value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2005

Product code	Product description	Export code 1/	Import code 2/
3345111106	Compasses (all types).....	9014.10.1040	9014.10.1000
		9014.10.1080	9014.10.6000
		9014.10.6040	9014.10.7030
		9014.10.6080	9014.10.7060
		9014.10.7040	9014.10.9000
		9014.10.7080	
		9014.10.9040	
3345111111, 115, 226, 232, 233, 335, 437 3345113101, 103	Search, detection, aeronautical, nautical, and navigational and guidance systems, equipment, and instruments, n.e.c. (except aircraft engine instruments).....	9014.20.2000	9014.20.2000
		9014.20.6000	9014.20.6000
		9014.20.8040	9014.20.8040
		9014.20.8080	9014.20.8080
		9014.90.0000	9014.90.2040
			9014.90.2080
	9014.90.6000		
	9014.80.1000		
3345113207, 212, 318, 325	Radar systems and equipment.....	8526.10.0010	8526.10.0020
		8526.10.0020	8526.10.0040
		8526.10.0070	
3345113651	Radio navigational aid receivers and displays.....	8526.91.0010	8526.91.0020
		8526.91.0030	8526.91.0040
		8526.91.0070	
3345113426, 428, 433, 436, 437, 441, 443, 545, 547, 549, 653, 661, 663, 669, 673, 681	Sonar search, detection, tracking, and communication systems and equipment, including ASW (sonar telephone, communication equipment, depth finding, fire control, fusing guidance, hydrophones, mapping, sonabuys, navigation, sonar fish finders, sonar range instrumentation, and other).....	9014.80.2000	9014.80.2000
		9014.80.6000	9014.80.4000
			9014.80.5000
3333141	Sighting, tracking, and fire control equipment, optical type.....	9013.10.2000	9013.10.1000
		9013.10.4000	9013.10.3000
			9013.10.4000

n.e.c. Not elsewhere classified.

1/Source: 2005 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2005).