



NOAA Aviation Safety Policy and NOAA Aviation Safety Program

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NOAA Marine and Aviation Operations
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Outline



-
- Purpose
 - Issue
 - Background & Discussion
 - Recommendation
 - Decision Request



Purpose



- **Decision Briefing**
 - NOAA's Aviation Safety Policy Update
 - NOAA's Aviation Safety Program
 - Funding Required

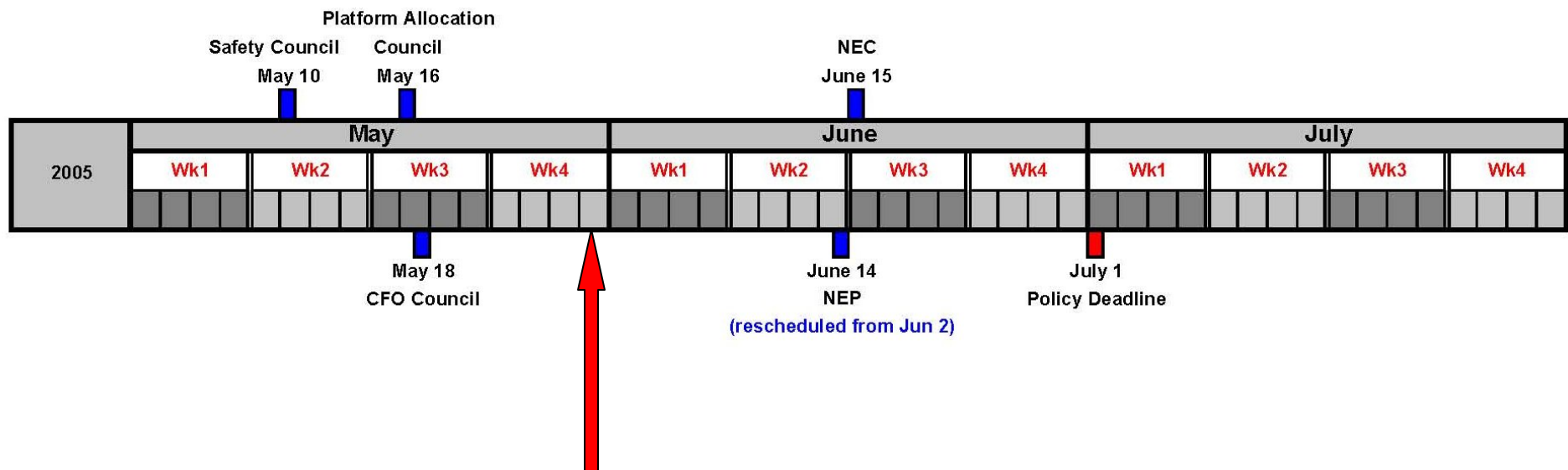
- **Desired Decision**
 - NOAA CFO Council Endorsement
 - Draft Aviation Safety Policy
 - Proposed Aviation Safety Program
 - Program Funding



Issue



- **NOAA's Aviation Safety Policy and Aviation Safety Program briefing schedule**



Target for CFO Council Decision – May 27th



Background

- **Safety Stand-Down Regarding Use of non-NOAA Aircraft**
 - Safety Stand-down issued November 19, 2004
 - Proactive vs. Reactive management of a safety concern
 - Aviation Safety Program identified as a gap in FY06 – FY10 PPBES
- **41 CFR 102-33 Management of Government Aircraft** [\(published in the Federal Register on November 6, 2002\)](#)
 - Requires NOAA to develop and implement “Flight Program Standards” for all aircraft operations



Draft NAO (version 4)



- **Aviation Safety Policy Highlights**

- Reduces risk associated with aircraft operations by
 - Ensuring aircraft meet NOAA airworthiness and operational safety standards*
 - Requiring medical screening of personnel
 - To identify personnel that could be placed in a work environment (flight) with the potential to aggravate existing medical conditions
 - Providing personnel with appropriate Aviation Safety Training* and Aviation Life Support Equipment (ALSE)*

* Major cost drivers for the Aviation Safety Program



Draft NAO (version 4)



- Aviation Safety Training**
(NMAO Recommendations)

Aviation Safety Training							
Training Method		NOAA E-Learning		Egress Video	Classroom and Hands-on	Classroom and Hands-on	Classroom and Hands-on
Training Frequency		annual	annual	once every 5 years		one time	one time
Flight Purpose and Environmental Conditions	Personnel	NOAA Aviation Policy and Procedures	Basic Aviation Safety and Survival	Water Ditching and Survival		High Altitude Physiology (Altitude Chamber)	Aviation Crash and Cold Weather Survival
Passenger Transportation	NOAA	√	√				
	Non-NOAA						
Passenger Transportation over water	NOAA	√	√	√			
	Non-NOAA						
Mission Operations Overwater	NOAA	√	√		√		
	Non-NOAA		√		√		
Mission Operations in Cold Weather (<32F)	NOAA	√	√				√
	Non-NOAA		√				√
Mission Operations above 10,000 feet	NOAA	√	√			√	
	Non-NOAA		√			√	

Note: NOAA Personnel may request more frequent training than what is listed above



Draft NAO (version 4)



- **Aviation Life Support Equipment (ALSE)**
(NMAO Recommendations)

Aviation Life Support Equipment (ALSE) required to be carried in the aircraft or worn by personnel				
Flight Purpose and Environmental Conditions	Life Raft of sufficient capacity for all aircraft occupants	Personal Floatation Device (PFD) (Life Vest)	Emergency Locator Transmitter (406MHz)	Anti-Exposure Suit
Passenger Transportation over water	√	√	√	
Mission Operations Overwater	√	√	√	
Mission Operations in Cold Weather (<32F air temp or <59F water temp)				√



Draft NAO (version 4)



- **Aviation Safety Policy Highlights (continued)**
 - Establishes a corporate NOAA
 - Aviation Safety Board
 - Aviation Safety Program
 - Ensures NOAA aviation safety standards are incorporated in aviation services procurement documents
 - Establishes requirement for all NOAA employee/pilots to meet the same operational safety standards to fly missions on behalf of NOAA



Aviation Safety Program



- **Program Highlights**

- Full-time aviation safety staff [Details](#)
- NOAA Aviation Safety Board (Reports to NOAA Safety Council)
- Provides aviation safety tools and training
- Acquire, distribute, and maintain ALSE
- Evaluates aircraft operators
- NOAA Aircraft Operator Database (NAOD)
- Host annual aviation safety conference
- NOAA aviation safety awards program
- Aircraft accident and incident database
- Assists NOAA contracting officials with safety aspects of aviation services procurement



Aviation Safety Survey Results



- **Personnel who fly for NOAA**
(as of April 30, 2005)

NOAA Personnel and Joint Research Partners/Visiting Scientists who may fly on official duty On other than Scheduled Air Carrier Aircraft				
Line Office	NOAA Employee	NOAA Contractor	Other	Total
NESDIS	2	2	2	6
NMFS	258	110	3	371
NOS	78	20	0	98
NWS	2,919	0	0	2,919
OAR	71	11	49	131
Total	3,328	143	54	3,525



Aviation Safety Survey Results



- **Training Gap**
(April 2005 Survey Data)

Aviation Safety Training Provided by Line Office or AOC					
Line Office	Training received within previous 5 years				
	Number of Personnel Identified in Survey	Basic Aviation Safety	Water Survival Training	Cold Weather Survival Training	Altitude Chamber Training
NESDIS	6	0	0	0	0
NMFS	371	44	37	0	NA
NOS	98	57	55	0	2
NWS	2919	22	0	22	NA
OAR	131	53	0	0	0
Total	3525	176	92	22	2

Additional Training Required



Training Required by Line Office				
Total Number of Personnel				
Line Office	Basic Aviation Safety (NOAA E-Learning)	Water Survival Training	Cold Weather Survival Training	Altitude Chamber Training
NESDIS	6	6	6	6
NMFS	371	276	24	0
NOS	98	30	66	3
NWS	2919	40	56	0
OAR	131	92	73	99
Total	3525	444	225	108



Aviation Safety Survey Results



- **Aviation Life Support Equipment Gap** (April 2005 Survey Data)

Line Offices Reported some ALSE purchased by Staff Offices and available at the Unit level (not standardized across NOAA)

Additional ALSE Required



ALSE Required by Line Office					
Total Number of Units					
Line Office	Switlick Vest	PLB	Near-Shore Raft	Offshore Raft	Anti-Exposure Suit
NESDIS	0	0	0	0	0
NMFS	100	19	5	4	73
NOS	12	3	1	0	9
NWS	11	3	0	0	11
OAR	27	7	0	2	10
	150	32	6	6	103



Cost Estimate



- **Required Aviation Safety Training**
 - Centralized procurement of Training via contracts with commercial vendors
 - FY06 - 75% of Training identified in Survey
 - FY07 - Balance of initial training required
 - FY08 -FY12 – 20% of Training identified in Survey
 - Initial training for new personnel and recurrent training
- **Required ALSE**
 - Centralized procurement and maintenance of ALSE
 - FY06 - 100% of ALSE identified in Survey
 - FY07 – 25% of ALSE identified in Survey
 - FY08 – FY12 – 10% of ALSE identified in Survey
 - New and replacement equipment



Funding Options

- **Proposed Method for dividing Program cost among the Line Offices**
 - Each LO funds their training and ALSE requirements
 - Program Management cost divided among the LO's based on their percentage of overall personnel requiring hands-on training

Hands-On Training Required by Line Office				
Total Number of Personnel				
Line Office	Water Survival Training	Cold Weather Survival Training	Altitude Chamber Training	% of total Personnel
NESDIS	6	6	6	2%
NMFS	276	24	0	39%
NOS	30	66	3	13%
NWS	40	56	0	12%
OAR	92	73	99	34%
	444	225	108	

} % of total Program Management cost charged to each Line Office



Funding Options



- **Option #1**
 - Includes travel funds for Line Office personnel to participate in required training
- **Option #2**
 - No travel funds for Line Office personnel incorporated in the cost estimate

Training cost details

\$Thousands (in FY 2005 Dollars)			
Training Type	Training	Travel	Total
Cold Weather Survival	\$0.285	\$1.950	\$2.235
Water Survival	\$0.500	\$1.500	\$2.000
High Altitude Physiology	\$0.700	\$1.500	\$2.200



Funding Required



Aviation Safety Program Funding Required				
\$K (FY05 dollars)				
	FY05	FY06	FY07	FY08-FY12
Option #1	\$173	\$2,089	\$1,487	\$963
Option #2	\$173	\$1,139	\$853	\$709

Option #1 includes travel for Line Office personnel training

Option #2 does not include travel for Line Office personnel training



Funding Options



- Breakout by Line Office

Aviation Safety Program Funding Required									
\$ Thousands (FY05 dollars)									
Line Office	% of Total	FY05		FY06		FY07		FY08-FY12	
		Option #1	Option #2	Option #1	Option #2	Option #1	Option #2	Option #1	Option #2
NESDIS	2%	\$3	\$3	\$42	\$19	\$32	\$17	\$20	\$14
NMFS	39%	\$67	\$67	\$863	\$517	\$583	\$352	\$376	\$284
NOS	13%	\$22	\$22	\$259	\$125	\$191	\$102	\$124	\$89
NWS	12%	\$21	\$21	\$245	\$118	\$180	\$95	\$116	\$82
OAR	34%	\$59	\$59	\$682	\$360	\$502	\$287	\$326	\$240
Total		\$173	\$173	\$2,089	\$1,139	\$1,487	\$853	\$963	\$709

Option #1 includes travel for Line Office personnel training

Option #2 does not include travel for Line Office personnel training



Aviation Safety Management



- **NOAA Aviation Safety Policy (NAO)**
 - Brings NOAA into compliance with 41 CFR 102-33 Management of Government Aircraft
 - Standardized aviation safety policy for NOAA
 - Aviation Safety Management
- **Corporate NOAA Aviation Safety Program**
 - Reduce risk associated with NOAA's aviation operations
 - Creates safe 'aviation' work environment for NOAA personnel
 - Manages the components of an effective aviation safety program



ASP Implementation



Aviation Safety Program Implementation Plan							
Task	Coordination	FY05	FY06				FY07
		Q4	Q1	Q2	Q3	Q4	Q1
Process NAO for formal clearance	CAO	X					
Secure FY05 Funding		X					
Write Charter for Aviation Safety Board		X					
Hire Staff	Human Resources	X	X				
Draft Aviation Contract Language	Acquisitions & Grants	X	X	X			
Develop Aircraft Operator Evaluation Criteria	Aviation Safety Board	X	X				
Develop on-line databases (medical and aircraft operator)		X	X	X			
Develop NOAA E-Learning Modules	Training	X	X	X			
Develop Aviation Safety Awards Program	NOAA Safety		X				
Develop Aviation Accident/Incident Database	NOAA Safety		X				
Develop Risk Assessment/Mishap Response Tools	Aviation Safety Board		X	X			
Plan first annual Aviation Safety Conference				X			
Contracts established with training vendors				X	X		
Medical Screening				X	X	X	X
Aviation Safety Training for Personnel				X	X	X	X
Purchase ALSE				X	X	X	X
Aircraft Operator Evaluations				X	X	X	X
Host first annual Aviation Safety Conference					X		
Lift Safety Stand-down							★



Recommendation to NEC



- **Upon NEC approval of Program and Policy**
 - Approve funding transfer - 1 July 2005
 - Approve Aviation Safety Policy with full implementation required by **1 October, 2006**
 - Continue “safety stand-down” policy and procedures until full program and policy implementation is possible
 - Allow NMAO to send draft NAO (version 4) to CAO for formal clearance process



Decision Request



-
- **Request NOAA CFO Council Endorsement**
 - Aviation Safety Policy
 - Aviation Safety Program
 - Funding for the Program



Additional Information





Program Management



- **Labor (5 FTE)**
 - Program Manager (NOAA Corps O-4)
 - Program management and reporting
 - Supervise employees
 - Develop and implement policies and procedures
 - Develop on-line aviation safety training
 - Chair Aviation Safety Board
 - Accident/Incident investigation and analysis
 - Strategic Planning and Communication
 - Program Analyst (GS 12)
 - Schedule Training of Line Office Personnel
 - Coordinate Aircraft Operator Evaluations
 - Maintain website and databases
 - Coordinate/Plan annual aviation safety conference



Program Management



- **Labor (5 FTE)**
 - **Contract Specialist (GS 11)**
 - Contracts for Aviation Safety Training
 - Contracts for Aircraft Operator Evaluations
 - Assist NOAA Programs with drafting aviation contracts
 - Source selection board advisor (evaluate offeror's aviation credentials)
 - **ALSE Technician (Contractor)**
 - Purchase, Maintain and Distribute ALSE
 - Provide ALSE training
 - Maintain database to track ALSE
 - **Administrative Assistant (GS 7)**
 - Travel authorization and vouchers
 - T&A for staff
 - Filing and Correspondence



Funding Required



- FY05 (4th quarter)**

NOAA Aviation Safety Program \$Thousands (in FY 2005 Dollars)			
Cost Item	What is Purchased	FY05 (4th qtr) Option #1	FY05 (4th qtr) Option #2
Labor	5 FTE (O-4, GS12, GS11, GS7, contractor)	\$115.752	\$115.752
Aviation Safety Training		\$0.000	\$0.000
Aircraft Operator Evaluation		\$0.000	\$0.000
Aviation Life Support Equipment Purchase		\$0.000	\$0.000
Travel (Safety Office Staff)	staff travel	\$4.500	\$4.500
Office Equipment and Supplies	computers, software, publications	\$14.000	\$14.000
Web Database Development	online medical screening/ NAOD database	\$35.000	\$35.000
Annual Safety Conference/Awards/Publications/Tools	10 underwater egress videos	\$3.250	\$3.250
	ProgramTotal	\$172.502	\$172.502

GS Employee Salary calculations include:

Benefits (28% of salary)

Comp time/overtime/awards (5% of salary)

Office Costs/Incidentals/Training (4% salary and benefits)

Option #1 includes travel for Line Office personnel training

Option #2 does not include travel for Line Office personnel training

Labor	\$115.752	\$115.752
Line Office Training and ALSE	\$0.000	\$0.000
Program Management	\$56.750	\$56.750



Funding Required



- FY06**

NOAA Aviation Safety Program \$Thousands (in FY 2005 Dollars)			
Cost Item	What is Purchased	FY06 Option #1	FY06 Option #2
Labor	5 FTE (O-4, GS12, GS11, GS7, contractor)	\$463.008	\$463.008
Aviation Safety Training	75% of training identified in April 2005 Survey	\$1,221.357	\$271.295
Aircraft Operator Evaluation	15 Aircraft Operators	\$37.500	\$37.500
Aviation Life Support Equipment Purchase	100% of ALSE identified in April 2005 Survey	\$238.060	\$238.060
Travel (Safety Office Staff)	staff travel	\$16.500	\$16.500
Office Equipment and Supplies	computers, software, publications, supplies	\$25.000	\$25.000
Web Database Development	online medical screening/ NAOD database	\$0.000	\$0.000
Annual Safety Conference/Awards/Publications/Tools	Safety Conference for 75 participants, Awards, Tools	\$88.000	\$88.000
ProgramTotal		\$2,089.425	\$1,139.363

GS Employee Salary calculations include:

Benefits (28% of salary)

Comp time/overtime/awards (5% of salary)

Office Costs/Incidentals/Training (4% salary and benefits)

Option #1 includes travel for Line Office personnel training

Option #2 does not include travel for Line Office personnel training

Labor	\$463.008	\$463.008
Line Office Training and ALSE	\$1,459.417	\$509.355
Program Management	\$167.000	\$167.000



Funding Required



- FY07**

NOAA Aviation Safety Program \$Thousands (in FY 2005 Dollars)			
Cost Item	What is Purchased	FY07 Option #1	FY07 Option #2
Labor	5 FTE (O-4, GS12, GS11, GS7, contractor)	\$463.008	\$463.008
Aviation Safety Training	50% of training identified in April 2005 Survey	\$814.238	\$180.863
Aircraft Operator Evaluation	10 Aircraft Operators	\$25.000	\$25.000
Aviation Life Support Equipment Purchase	25% of ALSE identified in April 2005 Survey	\$59.515	\$59.515
Travel (Safety Office Staff)	staff travel	\$16.500	\$16.500
Office Equipment and Supplies	computers, software, publications, supplies	\$23.500	\$23.500
Web Database Development	online medical screening/ NAOD database	\$0.000	\$0.000
Annual Safety Conference/Awards/Publications/Tools	Safety Conference for 75 participants, Awards, Tools	\$85.000	\$85.000
ProgramTotal		\$1,486.761	\$853.386

GS Employee Salary calculations include:

Benefits (28% of salary)

Comp time/overtime/awards (5% of salary)

Office Costs/Incidentals/Training (4% salary and benefits)

Option #1 includes travel for Line Office personnel training

Option #2 does not include travel for Line Office personnel training

Labor	\$463.008	\$463.008
Line Office Training and ALSE	\$873.753	\$240.378
Program Management	\$150.000	\$150.000



Funding Required



- FY08-FY12**

NOAA Aviation Safety Program \$Thousands (in FY 2005 Dollars)			
Cost Item	What is Purchased	FY08 - FY12 Option #1	FY08 - FY12 (Option #2)
Labor	5 FTE (O-4, GS12, GS11, GS7, contractor)	\$463.008	\$463.008
Aviation Safety Training	20% of training identified in April 2005 Survey	\$325.695	\$72.345
Aircraft Operator Evaluation	10 Aircraft Operators	\$25.000	\$25.000
Aviation Life Support Equipment Purchase	10% of ALSE identified in April 2005 Survey	\$23.806	\$23.806
Travel (Safety Office Staff)	staff travel	\$16.500	\$16.500
Office Equipment and Supplies	computers, software, publications, supplies	\$23.500	\$23.500
Web Database Development	online medical screening/ NAOD database	\$0.000	\$0.000
Annual Safety Conference/Awards/Publications/Tools	Safety Conference for 75 participants, Awards, Tools	\$85.000	\$85.000
ProgramTotal		\$962.509	\$709.159

GS Employee Salary calculations include:

Benefits (28% of salary)

Comp time/overtime/awards (5% of salary)

Office Costs/Incidentals/Training (4% salary and benefits)

Option #1 includes travel for Line Office personnel training

Option #2 does not include travel for Line Office personnel training

Labor	\$463.008	\$463.008
Line Office Training and ALSE	\$349.501	\$96.151
Program Management	\$150.000	\$150.000